#### **EXHIBIT 2**

## DEVELOPER'S SCHEMATIC DESIGN OF EAST END CROSSING AND PROPOSAL COMMITMENTS

2-A	Developer's Schematic Design
2-B	Preliminary Project Baseline Schedule
2-C	Financial Plan
2-D	Proposal Commitments
2-E	Preliminary Project Management Plan
2-F	Initial Design and Construction Commitment
2-G	Operations and Maintenance Plan
2-H	Equity Members, Contractors and Key Personnel Commitments
2-1	Cost Tables
	2-I(1) Summary Cost Table
	2-I(2) Capital Cost Table
	2-I(3) Operating Cost Table
2-J	Termination for Convenience Calculation Method
2-K	Equal Employment Opportunity Certification
2-L	Developer's Preliminary DBE Performance Plan
2-M	DBE Certification
2-N	Developer's Preliminary Workforce Diversity and Small Business Performance Plan
2-0	Buy America Certification
2-P	Use of Contract Funds for Lobbying Certification
2-Q	Debarment and Suspension Certification
2-R	Form of Drug-Free Workplace Certification
2-S	Form of Financial Close Certificate
2-T	Form of IFA Bring-Down Certificate

# EXHIBIT 2-A

# <u>Developer's Schematic Design</u>

See Volume II CD

### **EXHIBIT 2-B**

# PRELIMINARY PROJECT BASELINE SCHEDULE

[attached]

# Preliminary Project Baseline Schedule for Design and Construction

WVB is committed to reaching Project substantial completion by October 31, 2016. This commitment is driven by:

- Our past portfolio of successful projects, coupled with the scheduling plan we have in place, provides assurance the construction is safely completed eight months ahead of IFA's requirement.
- Increased investor confidence that results from a shorter construction schedule, as reflected in the negotiated financing rates, offer better value for IFA.
- Opportunity for IFA to generate toll revenue eight months earlier than anticipated.

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the preliminary PMP including IMS and Key Personnel and Task Managers during preliminary design. This allows WVB to hit the ground running upon commercial close and award of NTP 1. Key to WVB's efforts to coordinate the Project startup is issuing subcontracts, purchase orders, and utility agreements; performing field geotechnical analysis; and distributing updated designs to the key Project stakeholders.

WVB has gone through an iterative process to develop a list of proposed design units specifically created to expedite early construction activities. Critical design units identified:

- Section 4 Erosion and Sediment Control and Stormwater Pollution Prevention Plan
- \* Tunnel South Portal
- Section 5 Tower Foundations
- Section 4 Phase 1A MOT
- Ramp A Bridge and Roadway
- North River Road Drainage
- Harrods Creek Bridge Foundation

WVB is ready for close engagement with IFA, local stakeholders, emergency services, environmental agencies, and the general public to get the feedback required to generate and approve these early design units.

cal path. WVB's early design efforts to reduce the Tunnel length and optimize section properties supports our commitment to achieve substantial completion by October 31, 2016. The early design units for the Erosion and Sediment Control and the Tunnel South Portal are critical design activities to starting Tunnel excavation. Main span bridge work is near-critical and WVB's proposed early design units are planned to expedite foundation construction by fall of 2013.

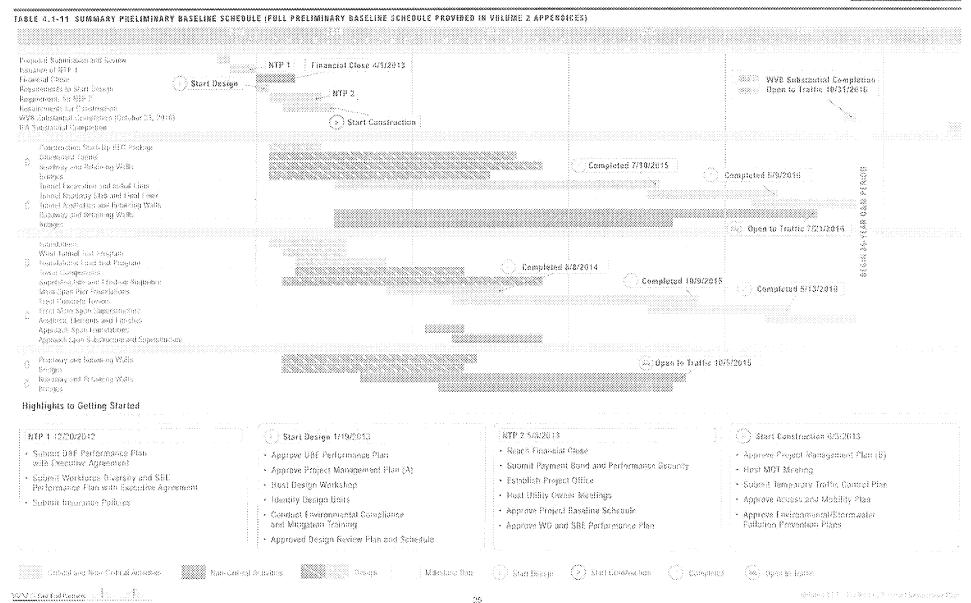
SETTING WIRESTONES: The milestones outlined in Table 4.1-10 are those listed in Exhibit 4 of the PPA. These dates are included as milestone activities in the Preliminary Project Baseline Schedule and reflect the logic and durations carefully developed throughout the proposal and bid process.

Roadway Sections 4 up to US 42 and Section 6 up to Salem Road is available for opening at the milestone dates of July 21, 2016, and October 5, 2015, respectively. Opening areas of the Project a combined 31 months ahead of IFA's substantial completion requirement increases public access to Salem Road and reduces traffic impacts, therefore enhancing public perception.

Table 4.1-11 is a summary schedule indicating the milestones and WVB's overall approach to scheduling the Project. Further details of our approach, including O&M details, are provided within Section 4.2.2.2 and 4.3.2.2 along with the schedule narrative and full preliminary P6 schedule provided in the Volume 2 Appendices.

TABLE 4.1-10 WYB'S TARGET MILESTONE DATES

***	Complete Main Span Pier Foundations	8/8/14
2	Complete Tunnel Excavation & Initial Liner	7/10/15
3	Complete Main Span Towers	10/9/15
4	Complete Western Limits of Section 6 Roadway	10/5/15
5	Complete Eastern Limits of Section 4 Roadway	7/21/16
6	Complete Final Tunnel Liner	5/9/16
7	Complete Main Span Superstructure Erection	5/13/16
8	Substantial Completion	10/31/16



# **EXHIBIT 2-C**

# **FINANCIAL PLAN**

[attached]

# FORM P

### FINANCIAL PLAN SUMMARY

### 1. SOURCES AND USES OF FUNDS

Sources of Funds	Total	Percent of total
Bank / Bond (Non-PA6)		C%
PABs	697,518,714	59%
Equity	81,885,495	7%
Interest earned on accounts	2,675,664	1%
Current Period Operational Revenue		9%
Milestone Payments	392,000,000	33%
		0%
Total Sources of Funds	1,174,079,874	100%

Uses of Funds	Total	Percent of total
Project Development Costs	25,795,590	2%
Development and Capital Costs	763,000,000	\$5%
Contingencies		0%
Financing Costs	124,856,138	11%
Working Capital	19,092,370	2%
Debt Service Reserve Account	11,857,307	1%
Reserve 1 (As Naeded)		098
Reserve 2 (As Needed)		0%
Reserve 3 (As Needed)		0%
SPV Costs	26,920,000	2%
Tax paid / (refunded)	603,414	0%
Senior Milestone Bond Repayment	195,987,958	16%

Indiana Finance Authority East End Crossing Form P Page 1 of 7 Request for Proposals ITP Forms Addendum #6

Deductibles Confingency Expense Paid	5,982 <b>,099</b>	3%
Total Uses of Funds	1,174,079,874	100%

### 2. EQUITY INVESTMENT ANALYSIS AND DESCRIPTION

Firm / consortium			
arember	Equity its	vestment	
	Amount (E)	% over total equity	Amount (D)
Billinger Berger Pl International Holding GmbH ("BBI")	27,295,165	33%	
Walsh investors, U.C ("Walsh")	27,295,165	33%	
VinCl Concessions S.A.3 ("ViNCl")	27,295,165	33%	
		<b>0</b> 76	
		0%	
		0%	
***************************************		0%	
TOTAL	31,865,495	100%	-

#### 3. FINANCING DATA

### 3.1. KEY FINANCING DATA

Key financing data	Value
NPV of project cash flows at 5% Nominal post-SPV-tax project	
IRR Réal post-SPV-tax project IRR	
Nominal pre-SPV-rax project IBR	
Real pre-SPV-tax project iRR	
Nominal post-SPV-tax equity IRR	
Real post-SPV-tax equity IRR	
Nominal pre-SPV-tax equity IRR Real pre-SPV-tax equity IRR	

Indiana Finance Aethority East End Crossing Form P Page 3 of 7 Request for Proposals ITP Forms Addendum #6

	description of
Naminal debt IRB	-
Real debt IBR	-
Minimum 05CR	- Andrewsky
Average DSCR	e amplemente easy
Minimum PLC8	
Average PLCR	
Minimum LLCR	
Average LLCN	

Debt type *	Amount	Base rate **
Private Activity Bonds	697,518,714	see 6. below
······································	in a series of the series of t	

<sup>\*</sup> Senior debt, bonds, mezzanine debt, etc.

### 4. SENSITIVITIES

# Model Sensitivity Analysis Changes in interest rate from pre-proposal submittal

		Upward	Movement			Downward	Movement	
Ÿear	.50bps	100ора	15Obps	200bps	50bps	100bps	150bps	200bps
	34,303	36,054	40,341	42,731	30,816	29,574	28,711	28,522
2016	6,272	6,592	7,376	7,813	5,634	5,425	5,249	5,215
2017	38,106	40,051	44,812	47,468	34,232	32,983	31,894	31,684
2018	39,058	41,052	45,932	48,655	35,089	39,787	32,691	32,476
2019	40,035	42,078	47,081	49,871	35,965	34,632	33,508	33,288
2020	41,034	43,129	48,256	51,116	36,863	35,496	34,345	34,119
2021	42,061	44,208	49,464	52,396	37,786	36,385	35,205	34,973
2022	43,113	45,314	50,701	53,706	38,730	37,295	36,005	35,848
2023	44,191	46,446	\$1,968	55,048	39,698	38,227	38,987	36,744

Indicina Finance Authority East End Crossing Form P Page 4 of 7 Request for Proposals ITP Fores Addiendum #6

2024	45,294	47,606	53,266	56,422	40,689	39,181	37,910	37,661
2025	46,428	48,798	54,599	57,835	41,708	40,162	38,859	38,604
3036	47,589	50,018	55,964	59,281	42,751	41,166	39,831	39,569
2027	48,776	51,258	57,363	60,763	43,820	42,195	40,827	49,558
2028	49,996	52,548	58,795	62,280	44,914	43,249	41,846	41,571
2029	51,248	53,864	60,267	63,839	46,038	44,331	42,893	42,611
2030	52,529	59,210	61,774	65,435	47,189	45,440	43,966	43,577
2031	53,842	56,590	63,318	67,071	48,369	46,575	45,065	44,769
2032	55,186	58,003	64,899	68,745	49,576	47,739	46,190	45,886
2033	56,568	59,455	66,524	70,466	50,817	48,934	47,346	47,035
2034	57,982	60,942	68,187	72,228	52,088	50,157	48,530	48,211
2035	59,432	62,465	69,897	74,034	53,390	51,411	49,743	49,436
2036	60,915	64,025	71,636	75,882	54,723	52,694	50,985	50,650
2037	52,440	65,628	73,430	77,782	56,093	54,014	52,361	51,918
2038	64,001	67,268	75,266	79,726	\$7,495	55,364	53,568	53,215
2039	65,601	68,950	77,147	81,719	58,933	56,748	54,907	54,546
2040	67,239	70,671	79,073	83,759	60,404	58,165	56,278	55,908
2041	68,922	72,441	81,053	85,856	61,916	59,621	57,687	52,308
2042	70,646	74,252	83,079	88,003	63,464	61,111	59,129	58,740
2043	72,412	76,108	85,156	90,203	65,050	62,639	60,607	60,209
2044	74,219	78,008	87,282	92,455	66,674	64,203	62,120	61,712
2045	76,078	79,961	89,467	94,769	68,344	65,810	63,675	63,257
2045	77,979	81.960	91,704	97,139	70,052	67,456	65,267	64,838
2047	79,929	84,009	93,996	99,567	71,804	69,142	66,899	66,459
2048	81,924	86,106	96,343	102,053	73,596	70,868	68,569	68,119
2049	83,975	88,262	98,755	104,608	75,439	72,642	70,286	69,824
2050	86,075	90,468	101,224	107,223	77,325	74,458	72,043	71,569
2051	73,301	77,043	86,202	31,311	65,850	63,409	61,352	60,949
2052								

## 5. PROPOSAL DEVELOPMENT COSTS

Cost Item	Total
Proposer's Financial Advisor	
Proposer's Financial Advisor Expenses	
Proposer's Development Fee	
Proposer's Legal Advisor	
Band trustee initial fee	
Proposer's Tax & Accounting Advisor	
Proposer's Insurance Advisor	
Proposer's Model Audit Costs	

Indiana Finance Authority East End Crossing Form P Page 5 of 7

Cost Hem	Total
Finance - Legal Costs	
Finance - Technical Advisor	
Finance - insurance Advisor	
Communications/PR	
Printing	
Contingency	
TOTAL	25,798,590

### 6. BENCHMÄRK RATES ÄND CREDIT SPREADS

Facility	Benchmark Identification / description	Benchmark Rate (A%)	Credit Spread (credit margin) (B%)	Total Interest Rate (A% + B%)	Assumed Batings	Approximate Average Life of the Financing Instruments
Facility C - Serior Milestone Bond	DMM AAA	0.79%	1.75%	2.54%	888	5.75*
Facility D - Senior LT Bond - PABs Series 1	AAA MMD	e/a	n/a	r/a	n/a	8/3
Facility D - Senior LT Bond - PABs Series 2	AAA MMD	8/9	8/3	N/x	n/a	n/a
Facility D - Senior LT Bond - PABs Series 3	AAA MMD	2.83%	1.25%	4.08%	D88	24.9
Facility D - Senior LT Bond - PABs Series 4	AAA MMD	2.83%	1 36%	4.19%	888	32.1
Facility D - Senior LT Bond - PABs Series S	AAA MMD	2,83%	150%	4.33%	283	36.0

\*assumed to be propaid approximately 3.75 years from Financial Close, in which case the average life is c.3.75 years

#### 7. MAP ESCALATION

Percentage of MAP subject to Percentage of MAP subject to fixed escalation of 2.5% CPI escalation

80% 20%

Proposer: \

Signature:

Tifle:

Indiana Finance Authority East End Crossing Form P Page 7 of 7 Request for Proposals ITP Forms Addendum #6

### EXHIBIT 2-D

### PROPOSAL COMMITMENTS

Attachment 1: Proposal Commitments

Attachment 2: ATC's

# Attachment 1 to Exhibit 2-D

# **Proposal Commitments**

Commitment No.	Proposal Location	Proposal Commitment
1.	Volume 1, Executive Summary, pages 7-8 and Volume 2, Preliminary Performance Plan, Page 18	Developer shall exceed 9% DBE, with anticipated achievement of the Proposal goal of 9.23% participation. Developer shall take affirmative efforts to achieve the increased participation goals. Developer shall provide a monthly report of such efforts to IFA
2.	Volume 1, Executive Summary, pages 8-9	Developer shall pay for and sponsor a partnering meeting with IFA and INDOT to establish lines of communication, goals and meeting schedules for stakeholder groups.
3.	Volume 1, Executive Summary, page 10	Developer shall develop the Handback Plan to be fully implemented no later than 6 years prior to the end of the Term.
4.	Volume 2, Preliminary Performance Plans, Section 4.1.1, Sheet 7	The Construction Manager, the Bridge Construction Manager, the Tunnel Construction Manager and the Construction QC Manager shall be fully committed, full-time to the East End Crossing for the period from NTP1 until Final Acceptance.
Ę.	Volume 2, Preliminary Performance Plans, Section 4.1.1, Sheet 7	The Project Manager and Deputy Project Manager shall be fully committed, full-time to the East End Crossing for the period from NTP1 through the end of the Term.
6.	Volume 2, Preliminary Performance Plans, Section 4.1.1, Sheet 7	The Environmental Compliance Manager shall be fully committed, full-time to the East End Crossing, for the period from NTP1 to commencement of the Operating Period.

7.	Volume 2, Preliminary Performance Plans, Section 4.1.1, Sheet 13	On or before the Effective Date, Developer shall, at its expense, hold a project partnering meeting to establish lines of communication, goals, and meeting schedules, as appropriate, for stakeholder groups, and shall continue such partnering meetings on a no less than quarterly schedule throughout the Term.
€.	Volume 2, Preliminary Performance Plans, Section 4.1.1, Sheet 13, Table 4.1.5	Developer shall (a) hold weekly maintenance of traffic (MOT) meetings with INDOT and KYTC (together, or separately, and as appropriate as to each) to mitigate impacts of the Work on the public and (b) provide monthly updates to Emergency Services regarding MOT activities.
9.	Volume 2, Preliminary Performance Plans, Section 4.1.1, Sheet 14	Developer shall cause its Contractor, Guthrie/Mayes, to lead a team consisting of the Project Manager, the Construction Manager, the Aesthetics Manager, the MOT Manager, the Safety Manager and the DBE Coordinator in the active and regular use of social media to notify the public rapidly of incident alerts and to provide for two-way communications concerning road conditions, project progress and suggestions for avoiding closures. Such program shall include use of smartphone "apps" to make all such information more easily accessible. Developer shall monitor web pages and comment threads, providing prompt responses and encouraging respectful and productive information exchange through widely-used social media outlets.
10.	Volume 2, Preliminary Performance Plans, Section 4.1.1, page 15	Developer shall establish a project website with a live-feed webcam for residents to stay up-to-date on construction progress.
11,	Volume 2, Preliminary Performance Plans, Page 19	Developer shall meet targets of 15% minority workforce and 10% female workforce during the Term.
12.	Volume 2, Preliminary Performance Plans, Section 4.1.2, page 19	Developer shall provide a mentor/protégé program to C. Lee Construction Services and Messier & Associates Inc. as part of Developer's DBE-related obligations.

13.	Volume 2, Preliminary Performance Plans, Section 4.1.2, page 19	Developer shall, at its expense, provide training at no cost to DBE firms in safety (OSHA 10 and 30 hour programs), Superintendent and Foreman training, Project Engineer training, Crane Awareness, and Profit / Loss Statement Training.
14.	Volume 2, Preliminary Performance Plans, Section 4 1.2, page 19	Developer shall expedite the process for payment to DBEs, undertaking reasonable efforts to process payments in a manner that accommodates the cash flow needs of DBEs.
15.	Volume 2, Preliminary Performance Plans, Section 4.1.3, page 20	Developer shall implement an internship/co-op program that provides internships and training for a minimum of 10 high school and college co-op minority and female interns and trainees.
16.	Volume 2, Preliminary Performance Plans, Section 4.1.3, page 20	Developer and its Lead Engineer, Jacobs Engineering, and its sub- consultants shall employ a minimum of four design trainees throughout the design phase of the Work.
17.	Volume 2, Preliminary Performance Plans, Section 4.1.3, page 20	For design and construction Work, Developer and its Subcontractors shall employ a minimum of 14 professional trainees for a minimum of 800 hours per trainee.

18.	Volume 2. Preliminary	Developer shall employ no fewer than 6	65 trade trainees as set forth below:
	Performance Plans	Trade	Number
	Section 4.1.3, page 21	Pile Driver	5
	pago 11	Iron Worker	10
		Carpenters	13
		Operating Engineers	12
		Laborers	25
		Total	65
19.	Volume 2, Preliminary Performance Plans, Section 4.1.3, page 23	Developer shall provide induction traini supply chain members covering project environmental risks/requirements, quali	purpose, scope, basic safety,
20.	Volume 2, Preliminary Performance Plans, Section 4.1.3, page 23	Developer shall provide on-going training and task-specific, as well as general traincludes:  • supervisor training  • technical training  • environmental, safety and qual  • human resources training  • project management training  • insurance and legal training	ining for all team members. Training
21.	Volume 2, Preliminary Performance Plans, Section 4.1.6, page 31 & 32	Developer shall include within the Envir Plan design team training of all East Er requirements and constraints, induction environmental concerns, and provide to construction with the design team to ad	nd Crossing environmental n training to address key or periodic "brown bag" talks during

22.	Volume 2, Preliminary Performance Plans, Section 4,1.6, page 31 & 32	Developer shall provide environmental progress summaries to IFA monthly during construction. Such summaries shall describe environmental performance, on-site avoidance efforts, and mitigation activities during the preceding month.
23.	Volume 2, Preliminary Performance Plans, Section 4.1.6, page 33	Developer shall, during the final Punch List stage of construction, coordinate a workshop with IFA and INDOT to address and confirm the sustainability principles to be implemented during the Operating Period.
24	Volume 2, Preliminary Performance Plans, Section 4.1.6, page 34	Developer shall review and update the Sustainability Management Plan monthly at sustainability specialist team meetings to ensure that such plan remains relevant, meets contractual and regulatory requirements and meets IFA/INDOT sustainability-related expectations.
25.	Volume 2, Preliminary Performance Plans, Section 4.1.6, page 35	Developer shall develop and implement a risk management plan, which shall include the obligation for Developer to develop and maintain a risk register that will be discussed and updated at all project review meetings, with the most significant risks reviewed at monthly senior management team meetings with IFA and INDOT.
26.	Volume 2, Preliminary Performance Plan, Section 4.1.7, page 37	Developer shall ensure that all electronic data collected or generated by the East End Crossing will be routinely backed up with sufficient frequency (no less than once every twenty-four (24) hours) to an encrypted, secure "cloud" provider.
27.	Volume 2, Preliminary Performance Plans, Section 4.2.1.1, page 42	Developer's stay cable system shall be designed and constructed with a 75 year design service life.

.28.	Volume 2, Preliminary Performance Plans, Section 4.2.1.1, page 42	The East End Bridge superstructure shall utilize, in each case where appropriate, HPS 70W steel for girders and high performance concrete for deck panels and tower construction, and either or both for other key structural members.
29.	Volume 2. Preliminary Performance Plans, Section 4.2.1.2, page 46	Developer shall design the Tunnel electrical system to conform to NFPA 502 standards to enable systems operation for evacuation and first responders in the event of a fire.
30	Volume 2, Preliminary Performance Plans, Section 4,2,1,2, Page 47 & 48	Developer blasting operations shall occur during daylight hours only. Developer drilling operations outside of the Tunnel shall occur during daylight hours only.
31.	Volume 2, Preliminary Performance Plans, Section 4.2.1.2, page 48	Developer shall provide weekly blasting schedule updates to the public.
32.	Volume 2, Preliminary Performance Plans, Section 4.2.1.2, page 48	Developer shall provide 24 hour emergency contact information to the public.
33.	Volume 2, Preliminary Performance Plans, Section 4 2.1.3, page 51	Developer shall provide for temporary traffic staging to allow for long trailer vehicles, including those that contain shipments of 140 ft wind turbine blades.

34.	Volume 2, Preliminary Performance Plans, Section 4.2.13, page 51	Prior to NTP2, Developer shall hold public meetings with affected subdivision residents adjacent to Wolf Pen Branch Road regarding traffic sequencing during construction
35.	Volume 2, Preliminary Performance Plans, Section 4.2.1.3, page 54.	Developer shall provide site-specific environmental training to all workers before such workers are permitted to enter any wellhead protection area.
36.	Volume 2, Preliminary Performance Plans, Section 4.2.1.3, page 56 and 62	Developer shall use a 50 year concrete pavement design for pavement to be placed within the O&M Limits. At handback and in the Handback Plan, Developer shall provide 12 year useful life for pavement.
37.	Volume 2, Preliminary Performance Plans, 4.2.1.4, Page 59 and 78	Developer shall install "integral end bents" for RID Bridges 6 & 7 and semi- integral end bents for Bridges 9 – 12.
38.	Volume 2, Preliminary Performance Plans, 4.2.1.5, Page 60	Developer shall engage Contractor James H. Drew, Corp. to perform all Work relating to installation of the ITS.
39.	Volume 2, Preliminary Performance Plans, 4.2.1.5, Page 61	Developer shall activate DMS, CCTV and HAR at the earliest possible time in order to support communication with TMC and TRIMARC during construction.

40.	Volume 2. Preliminary Performance Plans, Section 4.2.1.7, page 64 and 65	Developer shall erect approach spans to eliminate piers within the Louisville Water Company sludge lagoon.
41.	Volume 2, Preliminary Performance Plans, Section 4.2.1.7, page 65, Figure 4.2-21; see also page 54, Figure 4.2-12 for detail of haul road	Developer shall install a construction berm with liners for the haul road (consisting in shot rock and stone caps) and laydown yards within wellhead protection area.
42.	Volume 2, Preliminary Performance Plans, Section 4.2 1.7, page 65, Figure 4.2-21	In connection with the design and construction of Section 4 of the East End Crossing, Developer shall bulk head and safe load the existing 10" sanitary sewer line in the Shadow Wood subdivision, as will be described in the Utility Agreement with the Metropolitan Sewer District.
43.	Volume 2, Preliminary Performance Plans, Section 4.2.1.7, page 65	Developer will conduct pre- and post-construction video surveys, continuous monitoring during blasting, and a post-construction follow-up video survey one year after construction for the 60" Louisville Water Company line.
44.	Volume 2, Preliminary Performance Plans, Section 4.2.2.1, page 70	Developer shall create a project charter based on Developer's vision, values and objectives and the requirements of the PPA Documents; with all of its Subcontractors and team members to sign the charter when completed

45.	Volume 2, Preliminary Performance Plans, Section 4.3.1, Page 78	Developer shall perform full deck replacement of the existing SR265 structures at the SR62 / Port Rd interchange, rather than the rehabilitation discussed in the relevant RID.
46.	Volume 2, Preliminary Performance Plans, Section 4.3.1, Page 78	Developer shall provide a structural health monitoring system that incorporates current structural health monitoring technology.
47	Volume 2. Preliminary Performance Plans, Section 4.3.1.1, page 78, Figure 4.3-1 (legend of inset in lower right- hand corner)	Developer shall provide at its O&M building dedicated public parking for at least ten vehicles for users of the shared use path.
48.	Volume 2, Preliminary Performance Plans, Section 4.3.1.1, page 79	During the Operating Period, Developer shall patrol the O&M Limits 24 hours/day, 7 days/week.
49.	Volume 2, Preliminary Performance Plans, Section 4.3.1.1, page 80	Prior to the commencement of the Operating Period, Developer shall develop a "Project Emergency Plan," detailing Developer's actions in case of an Emergency and establishing lines of communication with emergency responders, INDOT, KYTC, law enforcement agencies and other relevant private sector responders (e.g., towing and hazardous materials contractors).
50.	Volume 2, Preliminary Performance Plans, Section 4.3.1.1, page 81	During the Operating Period, Developer shall conduct safety audits to assess project safety, to identify and implement areas for improvement, and to review newly-developed industry best practices. Mitigation measures introduced by Developer will be recorded in writing, reported to IFA and INDOT and monitored to assess effectiveness, to include analysis of near-misses, in addition to actual incidents and accidents.

51.	Volume 2, Preliminary Performance Plans, Section 4.3.1.2, page 84	Ouring the Operating Period, Developer shall power-wash all bridge structures after each winter season, except for certain corrosion-sensitive elements of the East End Bridge Main Spans, such as, but not limited to, the weathering steel structure, where power-washing can cause premature deterioration of the corrosion protection.		
52.	Volume 2. Developer shall inspect facilities within the O&M limits daily for graft Preliminary Developer shall remove all graffiti from bridge structures within 24 ho from the earlier of receipt of notice or knowledge thereof and from high me towers and gantries within 72 hours. Developer shall apply an anti-gray coating on all bridge abutment and wall surfaces in the O&M Limits.  4.3.1.2e, page 84			
53.	Volume 2, Preliminary Performance Plans, Section 4.3.1.2g, page 86 and 90	Except as set forth in the next sentence. Developer shall conduct in-depth inspections on all structures within the O&M Limits every two years. For the East End Bridge, Developer shall conduct an in-depth inspection every six years with underwater inspections every four years.		
54.	Volume 2, Preliminary Performance Plans, Section 4.3 1.2, page 86	Developer shall engage Advitam as in-house systems monitoring specialist for risk-based analysis relating to the East End Crossing.		
55,	Volume 2, Preliminary Performance Plans, Section 4.3.1.2, page 86	Developer shall license and use Eversense software to collect ORB sensor data for the Term.		
56.	Volume 2, Preliminary Performance Plans, Section 4,3,1,3, page 90	Developer shall surface-seal concrete decks and barriers at least every four years starting at commencement of the Operating Period and continuing through the Term.		

57.	Volume 2, Preliminary Performance Plans, Section 4.3.2.1, page	Developer, through VINCI Concessions SAS, shall provide annual, on-site best practices O&M training to all O&M personnel regarding operation and maintenance of the East End Bridge.
58	Volume 2, Preliminary Performance Plans, Section 4,3,2,1, page	Developer shall have in place a fully-staffed O&M team no later than one month prior to Substantial Completion.
59.	Volume, Preliminary Performance Plan, Page 96	Developer shall ensure that any O&M facility has a public reception area with appropriate technical information about the East End Bridge. Developer shall also utilize a process reasonably acceptable to IFA for receiving and handling customer complaints
60.	Volume 2 Appendix Aesthetic and Landscaping Concept Master Plan page P-8.	Developer shall use LED lighting in all handrail located in Project Section 5, which lighting shall be aimed at the pathway and installed in a manner to prevent light pollution.

# 61. Volume 2 Appendix Aesthetic and Landscaping Concept Master Plan

Developer shall further develop the aesthetic plan contained in its Proposal such that the initial aesthetic plan delivered to IFA for its review includes preliminary pricing estimates for all applicable costs subject to payment out of the Landscaping Work Allowance, as set forth in the PPA Documents:

- LED lighting in the median (Page P-6)
- Faux-finish wall treatments at the bridge at Wolf Pen Branch Road (Page P-9)
- Decorative post lighting at the Wolf Pen Branch Road overpass (Page P-9)
- Faux-finish treatment on all concrete surfaces at Harrods Creek overpass (Page P-9)
- Wood guardrail along River Road under the Harrods Creek overpass (Page P-9)
- Decorative black metal fence on the overpass at Wolf Pen Branch Road (Page P-10)
- Steel Backed timber guardrail along Wolf Pen Branch Road (Page P-11).
- Stamped asphalt crosswalk at Wolf Pen Branch Road (Page P-11).
- Faux stone finish for both the north and south portals of the Tunnel (Pages P-20-22)
- Faux limestone finishes on concrete surfaces of Indiana bridges (as indicated) (Page P-26)
- Threshold berm between both Rosewell House and the roadway and Belleview Estate and the roadway (Page P-28).
- Faux stone concrete barrier in the approaches to the East End Bridge (Page P-29).
- Faux stoné finish for noise walls in Kentucky, White those in Indiana will be faux limestone (Page P-34)
- Faux stone PVC fence adjacent to residences along the railway line.(Page P-34).
- Four-rail white wood fencing along Wolf Pen Branch Road adjacent to residences (Page P-34).

62 Developer's commitments under this Exhibit 2-D also include compliance General with all statements, offers, terms, concepts or designs set forth in the Proposal that can reasonably be interpreted as (a) offers to provide higher quality items than otherwise required by the PPA Documents, (b) offers to perform services or meet standards in addition to or better than those otherwise required by the PPA Documents, or (c) terms or designs that are more advantageous to IFA than the requirements of the PPA Documents, in each case, as reasonably determined by IFA. IFA shall provide Notice to Developer of any such items set forth in the preceding sentence, as and when so determined. Such items shall be subject to review and comment by Developer within fifteen (15) days after receipt of such Notice to confirm whether each of the items accurately reflects Developer's commitment in the Proposal and is not otherwise a covenant of Developer or already addressed in the PPA Documents. After the expiration of such fifteen (15) day period. and after reviewing any comments received from Developer, IFA shall provide final Notice to Developer of each item to be deemed a commitment under this Exhibit 2-D, based upon IFA's reasonable determination that such commitment accurately reflects Developer's proposal and is not otherwise a covenant of Developer or already addressed in the PPA Documents. Such items shall be deemed a commitment under this Exhibit 2-D and part of the Work, upon receipt by Developer of such final Notice from IFA. Developer may dispute IFA's determination regarding any such commitment described in this paragraph 62 according to the Dispute Resolution Procedures. Such commitments, together with the other commitments set forth in this Exhibit 2-D, shall have the priority for purposes of the order of precedence in the Agreement as set forth in Section 1.2.3.1 thereof.

# Attachment 2 to Exhibit 2-D

# ATCs

WVB	4	Brookhollow Way Alternate Route - Connect S Brookhollow Way to Boulder Creek Subdivision
WVB	5	Tunnel Shortening - Move S Portals 220' N, move N. Portals 50' south, reduce pillar at south portal to 35'.
MAAB	6	Ramp A Modifications - Single Point Intersection w/ US 42
WVB	9	East End Bridge - Uncoated weathering Steel
WVB	15	Altérnativé shoulder pavement design

[see attached]



Indiana Finance Authority One North Capitol, Suite 900 Indianapolis, IN 46204

August 24, 2012

Sidney Florey, Project Executive WVB East End Partners 1260 East Summit Street Crown Point, Indiana 46307

RE: East End Crossing RFP, ATC WVB #3

Dear Mr. Florey:

The Indiana Finance Authority ("IFA") has reviewed the Alternative Technical Concept ("ATC") no. WVB #3 submitted on August 17, 2012 by WVB East End Partners in response to the Request for Proposals for the East End Crossing issued by the IFA on July 31, 2012 (as amended, the "RFP").

IFA's response to the referenced ATC is included in Attachment 1.

IFA appreciates your continued interest in the East End Crossing.

Sincerely,

Jácob Blasdel

IFA Project Manager

Janie Bluster

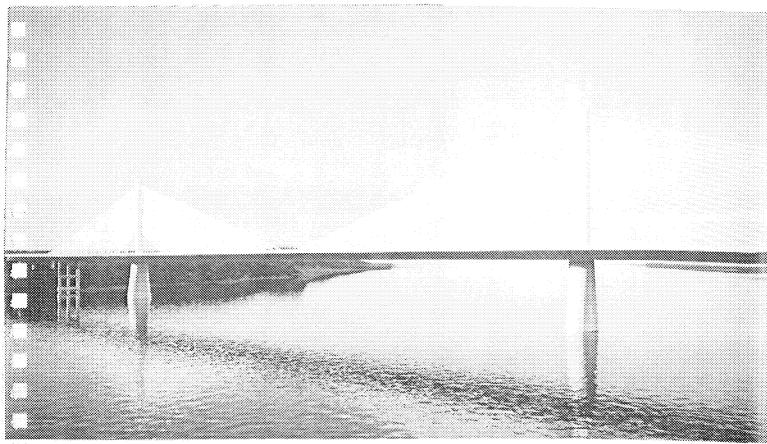
Attachment

## ATTACHMENT 1

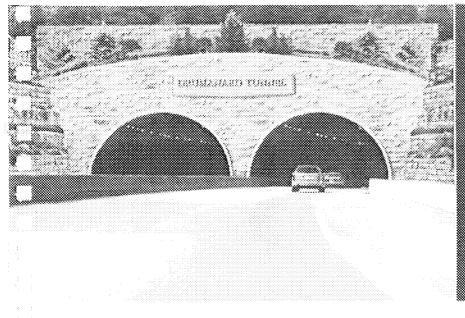
#### WVB East End Partners

August 24, 2012

1. ATC WVB #3 – The ATC appears to be within the requirements of the RFP as revised by Addendum #1 (Table 9-32) and does not qualify as an ATC, provided, however, that should it turn out that the concept as incorporated into the Proposal is not within the requirements of the RFP, IFA reserves the right to require compliance with the requirements of the RFP and PPA Documents (without regard to the submittal), in which event the Proposer will not be entitled to modify its Proposal or obtain a Change Order for additional compensation or a time extension under the Agreement. Please note the revised Level of Service requirements appearing in Addendum #1(Table 11-1).



CONFIDENTIAL



Ohio Rivar Bridges Project The East End Grossing Confidential ATCs

ATC-No.3

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#### Submitted to:

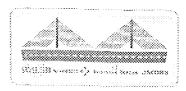
Indiana Finance Authority One Morth Capitol Avenue, Svite god Indianaçolis, Indiana 46204 Attention: Sarah Robin Telephone: 327.234.7762 Fax: 317.232.6796

Email Address: rlq@lfa.in.gov

# Submitted by:

WVV Seast End Partners

WVB East End Partners 1360 East Seminit Street Crown Point, Indiana 46307 Phone: 915,207,3905



WVB East End Partners (WVB) submits the following ATC to IFA for review and approval per the requirements of the East End Crossing ITP.

#### PART I: OVERALL DESCRIPTION OF THE ATC

(a) Sequential AFC member identifying the Proposer and the AFC number

#### WVB East End Partners

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#### ATC No. 3: Section 6 - Roundabout Interchange

(b) Description and conceptual drawings of the configuration of the ATC, including necessary design exceptions and a traffic operational analysis, if applicable,

#### Conceptual Drawings Begin on Page 6.

The preliminary design proposed in the RFP consists of a Diverging Diamond Interchange (DDI) at the SR 62 / SR 265 interchange and a semi-directional ramp interchange at the SR 265 / Port Road interchange.

WVB East End Partners (WVB) proposes that a Roundabout Interchange with a Collector-Distributor (C-D) system for the SR 265 / SR 62 / Port Road complex interchange be constructed as described below and as shown on the attached conceptual drawings.

#### SR 265 / SR 62 Interchange

Convert the proposed Diverging Diamond Interchange into a multi-lane Roundabout Interchange with right-turn by pass lanes.

#### SR 265 / Port Road Interchange

Convert the northern half of the interchange into a single-lane roundabout with by-pass lane and modify the southern half of the interchange by re-routing the EB SR 265 to SB Port Road movement through a C-D.

#### Modified Ramp Movements (See attached drawings for ramp labels)

- a. EB SR 265 to SR 62 off-ramp movement (IR-3) will be realigned closer to SR 265 due to the new geometry of the south roundabout at SR 62. This modification will widen Structure No 17 (EB SR 265 over Railroad) and eliminate Structure No 18 (IR-3 over Railroad). This ramp will provide access to northbound SR 62 through the roundabout interchange, and southbound SR 62 through a right-turn bypass lane. Southbound Port Road will also be accessed through this ramp by continuing east through the roundabout on a C-D lane.
- b. WB SR 265 to SR 62 off-ramp movement (IR-4) will be modified as a by-pass lane through the north roundabout at Port Road.

- East End Crossing
  - ii. NB Port Road to WB SR 265 on-ramp movement (IR-S) will be modified by connecting the north roundabout at Port Road to WB SR 265 with a parallel freeway entrance ramp to maintain free flow access from Port Road to WB SR 265.
  - d. NB Port Road to SR 62 movement (IR-6) will access SR 62 via the Port Road roundabout exiting to the C-D lane (IR-4).
  - e. WB SR 265 to SB Port Road off-ramp movement (IR-7) will be modified by utilizing the WB SR 265 to SR 62 exit ramp (IR-4), entering at the north roundabout on Port Road, circulating through the roundabout, and exiting to SB Port Road.
  - f. EB SR 265 to SB Port Road off-ramp movement (IR-8) will be re-routed via exit ramp IR-3 through the roundabout and onto the C-D lane (IR-9). This modification will allow the elimination of Structure No. 24 (IR-8 over IR-9). This modification will also eliminate the need to add a third travel lane and widen Structure No. 20 (SR 265 EB over SR 62).
  - g. SR 62 to SB Port Road movement (IR-10) will exit the C-D lane (IR-9) and merge with SB Port Road.
  - ii. NB Port Road to EB SR 265 on-ramp movement (IR-11) will utilize IR-9 to the eventual EB SR 265 parallel entrance ramp to maintain free flow access from Port Road to EB SR 265.

# Typical Sections

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For SR 62, the typical section will be modified to a five-lane section under the SR 265 bridges (two southbound lanes and three northbound lanes) with the roundabout ATC as compared to the 8-lane section of the RFP DDI preliminary design.

For Port Road, the typical section will be revised to a two-lane section over SR 265 (one lane in each direction) as compared to the three-lane section under SR 265 with the RFP preliminary design.

#### Grade Separation

The grade separation for SR 265 at Port Road will be modified such that SR 265 will be lowered and Port Road will be raised to go over SR 265. Structure 21 (WB SR 265 over Port Road), 22 (EB SR 265 over Port Road), and 23 (IR-9 over Port Road) will be eliminated and new Structure 25 (Port Road over SR 265) and new 26 (Port Road over IR-9) will be added.

#### Traffic Operations Analysis

The Roundabout Interchange concept was developed as an innovative and creative concept aimed towards value engineering efforts for this complex interchange. Similar to a DDI, a

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roundabout interchange is also one of the variations of a standard diamond interchange. Several single and multilane roundabout interchanges have been built throughout the US with firm plans to build many more of this interchange type on various state and federal highway facilities across the nation as well as in Indiana, thus demonstrating the familiarity and acceptance of the roundabout interchange. Roundabouts are gaining popularity due to their proven track record of providing safer and more efficient traffic flow. The entries at the roundabouts are flared and deflected, causing drivers to slow down and making intersections safer. Slower speeds reduce the severity of potential crashes and allow drivers and pedestrians more time to react to each other, thus increasing safety. In fact, studies by the Insurance Institute for Highway Safety show that roundabouts have:

- 90 percent fewer fatal crashes
- 76 percent less crashes with injury
- 30-40 percent reduction in pedestrian crashes
- 10 percent less bléyelé érashes
- Fewer conflict points, meaning fewer opportunities for crashes

This ATC will replace the two signalized ramp terminals of the DDI along SR 62 with two multilane roundabouts which are unsignalized with approaching traffic yielding to the circulatory traffic. Since traffic entering the roundabout has to wait only if a gap is not available, it helps keep the flow of traffic moving through the network. This effectively reduces the overall vehicular delay as well as the stops typically associated with signalized intersections.

The proposed ATC design outperforms the RFP design and is supported by traffic analysis which provides traffic operations and level of service (LOS) along the system as good as, and in some instances better than, the operations of the RFP preliminary design. The following software tools were used to evaluate roadway capacities and to compute the LOS for the various roadway elements proposed on this ATC:

- a) ARCADY 8 software developed by TRL to evaluate roundabout capacities
- b) VISSIM 5.40 a traffic simulation software tool to determine the overall roundabout capacities as well as for the operational evaluation of the overall system.
- e) HCS2010 software for analysis of highway mainline segments, ramp junctions and weaving segments

The traific forecasts for the design year (2030) were used to compute the LOS for this ATC. Capacity analysis and LOS for the roundabout ramp terminals along SR 62 and Port Road were computed using ARCADY 8. The capacity analysis outputs from the ARCADY 8 software tool are provided in Appendix A. Capacity analysis and LOS for the merge and diverge ramp junctions as well as the weaving segments were computed using HCS2010. The capacity analysis outputs from the HCS2010 software are provided in Appendix B. A VISSIM simulation model

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was developed to check and confirm the capacities compared using the ARCADY 8 and IRCS2010 software for the respective design elements. The ramp movements were evaluated in VISSIM to ensure there is no quote backing from the off-ramp terminus onto the maintine freeway. Figures I through 3 show the lane configuration of the proposed roundabouts at the SR 62 ramp terminals as well as at the north half of Port Road. Figures 4 through 6 show a snapshot from the VISSIM simulation model for the design year (2030) PM peak traffic. Table 1 below shows the comparison of the LOS between the proposed ATC and the RFP preliminary design.

Table 1 - LOS Comparison: ATC vs. RFP Preliminary Design

LOS Comparison: A'	TC vs. RFP	Design		
	2030 Build 1.05			
Facility Direction   Ramp Junction	ATC		RFP Design	
	AMPeak	PM Peak	AM Peak	FM Feak
Olverge Ramp Junctions				
SR 265 EB   SR 62 off-ramp (Diverge)	8		ŝ	ε
SB 265 EB   Post Road off-ramp (Diverge)	N/A	N/A	A	Ċ
SR 265 W8   SR 62/Port Road off-ramp (Diverge)		3	N/A	8/A
SR-265-W8 (-SR-62 off-ramp (Diverge)	N/A	N/A		8
Merge Ramp Junctions				
SR 205 kB   Port Road/SR 62 on-ramp (Merge)	8	0	8	0
58 265 WE   5R 62 on-ramp (Merger)	0	0	Ð	C
SK 285 VVB   Port Road on-ramp (Merge)*	B	Ð	N/A	81/A
Weaving Segment				
5R 765 WB   Weave Between Port Road on/off-ramps*	sy/A	N/A	<u> </u>	£
Intersection	ATC		RFP Design	
SR 62 & SR 265 EB Kamp (South Terminal)	A	] 3 ]	8	B
SR 62 & SR 265 WB Ramp via W8 C-D (North Terminal)	Α	A	В	33
Port Road & SR 265 W8 Ramp (North Terminal)	A	A	N/A	N/A

"The Wearing Segment in the BIP Design is replaced with a Morge section under ATC. This is a stuffic operational and safety improvement.

- Figure 1 Lane Configuration SR 62 & SR 265 Ramp Terminals (South Roundabout)
- Figure 2 Lane Configuration SR 62 & SR 265 Ramp Terminals (North Roundabout)
- Figure 3 Lane Configuration Port Road & SR 265 Ramp Terminals
- Figure 4 VISSIM Snapshot SR 62 & EB SR 265 Off-Ramp Terminal (South Roundabout)
- Figure 5 VISSIM Snapshot SR 62 & WB SR 265 Off-Ramp Terminal (North Roundabout)
- Figure 6 VISSIM Snapshot Port Road & WB SR 265 Off-Ranio Terminal

The proposed ATC is much cleaner with far fewer decision points for traffic exiting/entering (i.e. merging/diverging) the SR 265 mainline as compared to the RFP design, thus increasing the overall mobility and operational efficiency and enhancing safety.

East End Crossing

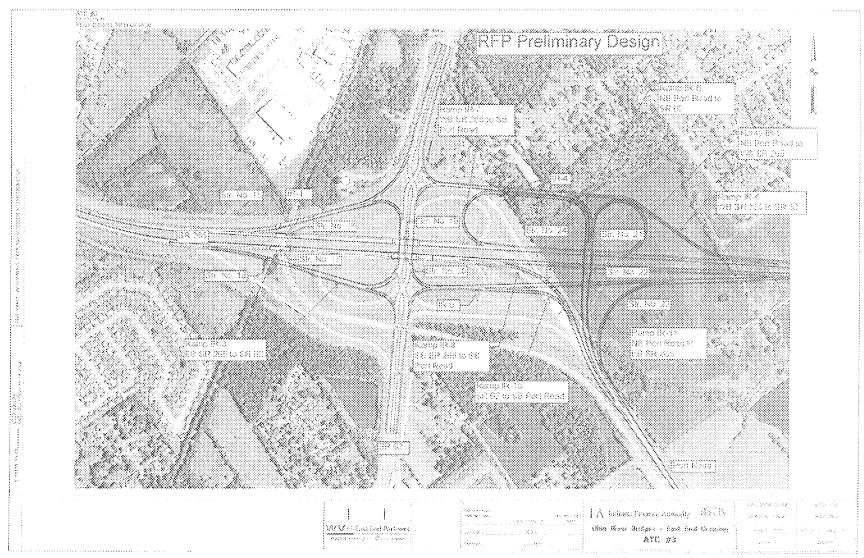
The proposed north roundabout at SR 62 & SR 265, as well as at Pert Road & SR 265, will operate at LOS A in the AM and PM peaks during design year (2030). The proposed south roundabout at SR 62 & SR 265 will operate at LOS A in the AM Peak and LOS B in the PM peaks during design year (2030). The traffic operations and LOS for the proposed ATC is comparable, and in fact better than the RFP design, and achieved with an overall reduced footprint. The LOS for all the ramp merge and diverge locations of the proposed ATC will operate at the threshold LOS per Section 11 of the Technical Provisions. The ATC also reduces overall delay and number of stops as compared to the RFP preliminary design.

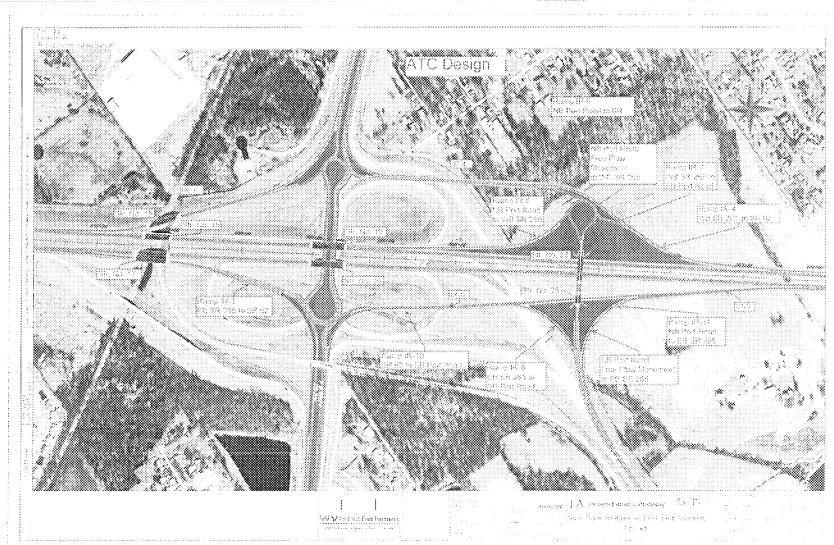
The proposed ATC will also provide a railroad crossing signal for railroad preemption along SR 62 SB direction which will be located north of the EB SR 265 off-ramp terminal. Provision of this signal will ensure that the EB SR 265 off-ramp movement heading NB on SR 62 as well as SB on Port Road via the thru movement on the EB C-D will have a potential to continue circulating without being impacted by the vehicles queuing or blocking the through ramp while the train is crossing. Additional warning signs will also be provided in the vicinity of the railroad tracks to warn the drivers. The proposed operations and impacts with the railroad crossing are anticipated to be no different than with the RFP preliminary design.

There will be no additional design exceptions with this ATC.

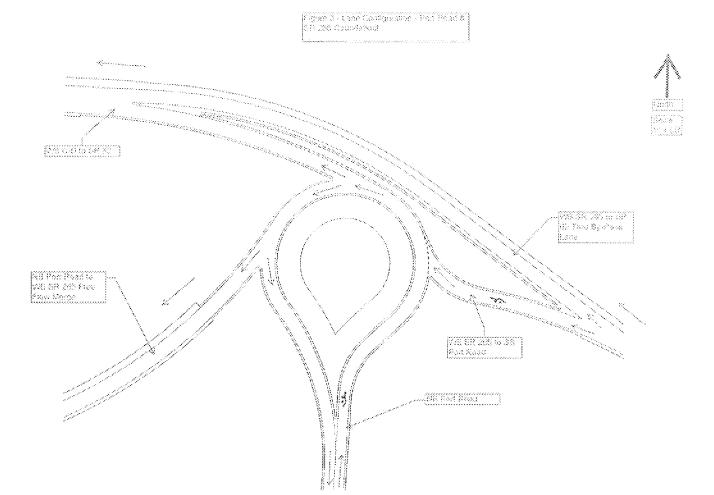
(c) ATC locations and Explanation of how the ATC will be used on the East End Crossing

The ATC is located at the SR 265/SR 62/Port Road complex interchange. The proposed fayout as described above will be used in lieu of the diverging diamond interchange at SR 62 and semi-directional interchange at Port Road.





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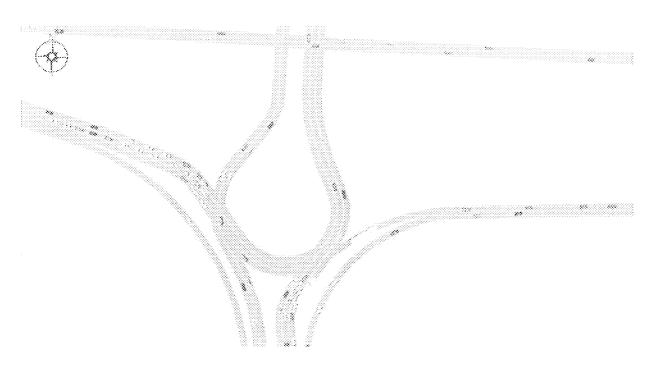


Figure 4 - VISSIM Snapshot PM Peak - SR 62 & SR 265 E8 Off-Ramp Terminal (South Roundabout)

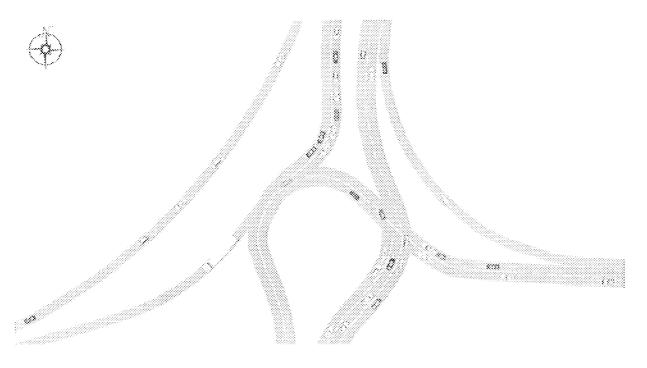


Figure 5 - VISSIM Snapshot PM Peak - SR 62 & SR 265 WB Off-Ramp Terminal (North Roundabout)

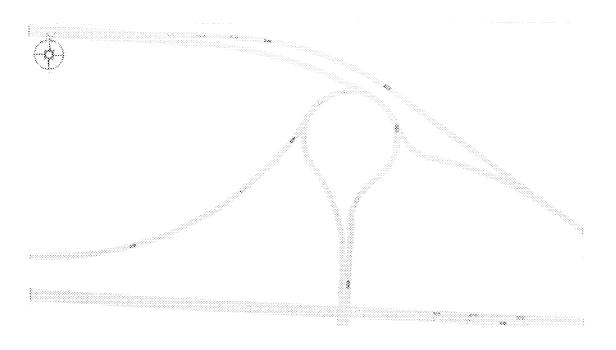


Figure 6 - VISSIM Snapshot PM Peak - Port Road & SR 265 WB Off-Ramp Terminal (North Roundabout)

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The overall inveline for construction of the interchange will be drastically reduced with this ATC. The ATC will allow for construction during three main stages of traffic compared to five stages as shown on the RID drawings. The overall reduction in construction effort and reduced traffic stages will significantly lower the impacts to the motoring public and local communities. The interchange, however, is not on the critical path of the project as a whole and will not allow for a reduction in the time period to reach Substantial Completion.

#### PART 3: ATC ANALYSIS AND JUSTIFICATION

(i) References to requirements of the RFP which are inconsistent with the proposed ATC, an explanation of the nature of the deviations from said requirements, and a request for approval of such deviations.

Technical Provision (TP) 9.2.1 Item No. 14 states that all superelevation transitions shall be designed according to the American Association of State Highway and Transportation Officials (AASHTO) Geometric Design of Highways and Streets. The emax used in the superelevation calculations shall be 8 percent, AASHTO Method 5, unless specified differently in this Section 9. In addition, both Port Road and SR 62 are classified as urban roadways with design speeds of 30 mph and 45 mph per TP Tables 9-31 and 9-32 respectively. The proposed ATC will utilize a curb and gutter section on both SR 62 and Port Road for the roundabout intersection design. AASHTO Method 5 is typically only applied to rural highways, urban freeways, and high-speed urban streets but not low speed urban roadways like Port Road and SR 62. WVB requests that the superelevation calculations used for Port Road and SR 62 be allowed to follow AASHTO Method 2. Low-Speed Urban Streets criteria with design speeds of 30 mph and 45 mph respectively. WVB also requests that the roundahout design speed be equal to 20 mph.

Technical Provision (TP) 9.3.2 - 2b requires SR 62 to have a six lane section with depressed median. The proposed ATC roundabout interchange only requires two lanes southbound and three lanes northbound, comprising a five lane section on SR 62. This is supported by traffic operations analysis. Curb and gutter is proposed to create a mised median instead of the depressed median defined in the TP. Curb and gutter is necessary in a roundabout to provide a clear delineation for drivers to navigate the roadway, and also to encourage drivers to stay within the paved roadway while traversing the roundabout. Surface runoff will be collected from the roadway with a storm sewer system where curb and gutter is located. WVB requests approval to modify SR 62 within the roundabout interchange to a five lane section with raised median.

TP 9.3.2 Table 9-2 Project Limits for the Indiana Approach requires approximate station limits for the ramps within the SR 265/SR62/Port Road interchange. WVB requests approval to modify those ramps and station limits in accordance with the ATC.

TP 9.3.2 Table 9-2 Project Limits for the Indiana Approach requires Bridge No. 18 - Ramp "IR-3" over RR Des #0900240 at Sta. 313+55.99 to Sta. 316+05.00 "IR-3". WVB requests approval

for elimination of this requirement of the RFP and allow Bridge Structure No. 17 to be widened instead.

TP 9.3.2 Table 9-2 Project Limits for the Indiana Approach requires Bridge No. 21 – WB SR 265 over Port Road Des #0900246 at Sta. 375+26.25 to Sta. 376+66.75 "LA-WB" and Bridge No. 22 – EB SR 265 over Port Road Des #0900245 at Sta. 375+62.64 to Sta. 377+03.14 "LA-EB". WVB requests approval for elimination of these requirements of the RPP and allow a bridge on Port Road to be constructed over SR 265 instead.

TP 9.3.2 Table 9-2 Project Limits for the Indiana Approach requires Bridge No. 23 -- Ramp "IR-9" over Port Road Des #0900247 at Sta. 917+15.88 to Sta. 918+49.00 "IR-9". WVB requests approval for elimination of this requirement of the RFP and allow a bridge on Port Road to be constructed over IR-9 instead.

TP 9.3.2 Table 9-2 Project Limits for the Indiana Approach requires Bridge No. 24 - Ramp "IR-8" over Ramp "IR-9" Des #1005117 at Sta. 812+15.66 to Sta. 813+94.96 "IR-8". WVB requests approval for elimination of this requirement of the RFP.

TP Table 9-17 lists the criteria for the construction of loop ramp IR-5. IR-5 will be eliminated and the NB Port Road to WB SR 265 movement will be made by exiting the Port Road roundabout to the new parallel entrance ramp to WB SR 265. WVB requests that the IR-5 ramp be designed as a parallel freeway entrance ramp instead of a loop ramp.

TP Table 9-19 lists the criteria for the construction of loop ramp IR-7. IR-7 will be climinated and the movement from WB SR 265 to SB Port Road will utilize the IR-4 off-ramp to Port Road roundabout. The approach to the roundabout, and the roundabout itself, will be designed according NCHRP Report 672: Roundabouts: an Informational Guide, Second Edition. WVB requests that the WB SR 265 to SB Port Road movement be made through the Ramp IR-4 approach to the Port Road roundabout using applicable roundabout design criteria.

TP Table 9-20 shows the requirements for IR-8. IR-8 will be eliminated and the EB SR 265 to SB Port Road movement will be made by allowing traffic to exit SR 265 through IR-3, make a through movement through the SR 62 South roundabout, and exit to Port Road through the C-D lane (IR-9). WVB requests that IR-8 rump be eliminated, and the EB SR 265 to SB Port Road movement be made through IR-3, the SR 62 south roundabout, and the IR-9 C-D lane.

TP Table 9-22 requires IR-10 to be designed using Interchange Rump criteria. The SR 62 to SB Port Road movement (IR-10) connects a low speed C-D lane (IR-9) to an urban collector (Port Road) with a design speed of 30 mph. Since it is not making a direct connection with a freeway, it does not need to be designed to interchange ramp standards. WVB requests that IR-10 be designed using turning roadway design requirements with a design speed of 30 mph.

TP Table 9-22 states the requirements used to design IR-11. NB Port Road to EB SR 265 Ramp (IR-11) is connecting an urban collector (Port Road) with a design speed of 30 mph to a C-D

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lane (IR-9). Since it is not making a direct connection with a freeway, it does not need to be designed to interchange ramp standards. WVB requests that the NB Port Road to EB SR 265 Ramp be designed using turning roadway design requirements with a design speed of 30-35 mph.

TP Table 9-31 states that Port Road is to be constructed with shoulder and auxiliary lane within the interchange. The proposed ATC will need a curb and gutter section with a storm sewer system along a portion of Port Road because of the implementation of the north roundabout at Port Road. In addition, an auxiliary lane will not be required within the interchange because of the elimination of IR-5. WVB requests that a portion of the Port Road be designed with a curb and gutter section and the elimination of auxiliary lane within the interchange.

TP 11.6.1 requires the installation of traffic signals at the two ramp terminals of SR 62 and SR 265 interchange. With the ATC roundabout interchange configuration, traffic signals are no longer needed, therefore WVB requests that the traffic signal requirement be climinated.

TP 14.5.9 Bridge Structure No. 18 requires a bridge structure on SR 265 Exit Ramp IR-3 to be constructed over CSX & Port of Indiana Radroad at Sta 314+80.50 Line "IR-3". WVB requests approval for elimination of this requirement of the RPP and allow Bridge Structure No. 17 to be widered instead to accommodate this ramp traffic movement.

TP 14.5.6 Bridge Structure No. 15 requires the existing bridge superstructure on DRW Ramp IR-1 over CSX Railroad to be removed and replaced. This ATC moves the superclevation transition off of the bridge. WVB requests approval for elimination of this requirement of the RFP and allow the existing bridge deck to remain in place (except for 5' at each end for joint replacement) and be widened as necessary to accommodate the additional lane and shoulder width.

TP 14.5.11 Bridge Structure No. 20 requires the existing bridge structure on EB SR 265 over SR 62 to be widened to accommodate three 12-foot travel lanes. WVB requests approval for climination of this requirement of the RPP because the ATC only requires two 12-foot travel lanes across this bridge structure.

TP 14.5.12 Bridge Structures No. 21 & 22 require bridge structures on SR 265 WB and EB to be constructed over Port Road at Sta 375+96.50 Line "LA-WB" and Sta 376+32.89 Line "LA-EB". WVB requests approval for elimination of this requirement of the RFP and allow a bridge on Port Road to be constructed over SR 265 instead.

TP 14.5.13 Bridge Structure No. 23 requires a bridge structure on SR 265 Rump IR-9 to be constructed over Port Road at Sta 917+83.75 Line "IR-9". WVB requests approval for elimination of this requirement of the RFP and allow a bridge on Port Road to be constructed over Ramp IR-9 instead.

TP 14.5.14 Bridge Structure No. 24 requires a bridge structure on SR 265 Ramp IR-8 to be constructed over IR-9 at Sta 813+03.95 Line "IR-8". WVB requests approval for elimination of this requirement of the RFP.

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(j) Analysis justifying use of the ATC and why the deviation, if vary, from the requirements of the RFP should be allowed.

From the discussion in Part I (b) and Part III (i) above, the interchange type has been altered from the preliminary design shown in the RFP. With the introduction of the roundabout interchange, some of the design criteria will no longer be applicable. Therefore, a different set of design criteria are necessary to best fit the content of the interchange. Moreover, traffic operational analysis and the description of the ATC provided in Part I (b) justifies that the proposed ATC will operate at a comparable level of service and, in some instances, better than the base design thus enhancing the overall safety, mobility, and operational efficiency of the proposed system.

Roundabouts have been gaining momentum in the United States since the early 1990's. Over the past several years, there were several roundabouts and roundabout interchanges constructed within the State of Indiana. More and more communities in Indiana are familiar with roundabouts and their operation. A multilane roundabout interchange could be considered a non-standard interchange in the community. However, there are many more multilane roundabout interchanges in operation in the United States than diverging diamond interchanges, which are also be considered a non-standard interchange.

(k) Preliminary analysis of potential impacts on vehicular teaffic (both during and after construction), community impact, safety, and life-cycle East End Crossing and infrastructure costs, including impacts on the cost of repair, maintenance and operation.

This ATC will have a positive impact on vehicular traffic. Roundabouts reduce the number of conflict points to 8 (Standard Diamond has 32 conflict points and DDI has 12 conflict points). The deflection on the roundabout approaches helps lower speeds and reduce severity of crashes. In addition, this ATC eliminates the possible wrong-way movements at the crossover of the RFP DDI preliminary design and the weaving segment along WB SR 265 between IR-5 and IR-7.

The roundabout intersections for this ATC have been designed to accommodate the numing movements of a WB-65 design vehicle and have also been designed to ensure that a semi-tractor pulling a 140' long wind turbine blade trailer can maneuver through the intersection.

The infrastructure and maintenance costs are reduced for the ATC because of the following modifications:

- Widen Structure No 17 in lieu of constructing new Structure 18.
- Widen IR-3 to accommodate IR-8 traffic movement through this exit ramp;
  - Eliminates the construction of IR-8 ramp
  - ii. Reduces widening at Structure No 20
  - iii. Eliminates Bridge No 24 and associated retaining wall length
- c. Eliminate IR-7 and IR-5 ramp alignments and accommodate the respective ramp movements through roundabout at north half of Pert Road.

- d. Eliminates Structure No 21, 22, and 23 and replace with Structure No 25 (Port Road over SR 265) & 26 (Port Road over IR-9).
- c. Widen Structure No 15 in lieu of replacing the existing bridge deck
- f. Eliminates widening of Structure No. 20 to accommodate a third travel lane
- g. Eliminates two traffic signals at the SR 62 ramp terminals from the RFP preliminary design and replaces with minor signal for the railroad preemption in the proximity of the south roundabout ramp terminal as identified in Part 2 (d) earlier.
- (1) Prediminary analysis of potential impacts on environmental permitting (including comparison to the NEPA Approvals and an analysis of whether the Proposer betheves on apidated or supplemental EIS would or would not be required and why).

There will be no additional impacts to environmental permitting or NEPA Approvats associated with this ATC. The ATC is located completely within the footprint of the existing project and therefore is within the areas previously studied for the EIS, SPEIS, and environmental permits. No wetlands will be impacted by the ATC and no additional clearing of forested areas will be required. Impacts to Stream 3a, as described on the Application for Authorization to Discharge Dredged or Fill Material to Isolated Wetlands and/or Waters of the State (Indiana Department of Environmental Management 401 Permit), will be the same or reduced due to implementation of the ATC.

Since the ATC is located entirely within the footprint of the project described in the approved SFEIS, and will not adversely affect communities, cultural resources, or the natural environment, we do not believe an updated or supplemental EIS will be required.

(m) Additional right of way required to implement the AFC.

The proposed ATC reduces the amount of required right-of-way, allowing the excess to be used by IFA for other purposes such as an operations and maintenance facility. It could also be used for environmental mitigation if needed.

(a) Description of either projects where the ATC has been used, the degree of success or failure of such usage and names and contact information including phone numbers and e-mail addresses for project owner representatives that can confirm such statements.

Below is a brief description of other projects where multi-lane roundabout interchanges are either constructed or planned for construction in the near future:

Keystone Parkway Roundabout Interchanges Project – Carmel, Indiana (Constructed)
 This award winning engineering excellence project has six roundabout interchanges (both single and multi-lane) on the five mile corridor that are operating successfully from the day they have been open to truffic. Additionally, the City of Carmel has several multi-lane roundabouts at grade that are operating successfully as well.

{ [...]

Contact Info of Project Owner Representatives:

Mayor Jim Brainard (City of Carmel)

Phone: (317) 571-2401

Email: jbrainard@carmel.in.gov

Mike McBride, PE (Director of Engineering - City of Carmel)

Phone: (317) 571-2441

Email: MMcBride@carmel.in.gov

The New US 31 Hamilton County Project – Indiana (Under Construction)
Following the success of the Keystone Parkway roundabout interchanges corridor, the US
31 project in Hamilton County has considered constructing single and multi-lane
coundabout interchanges at several locations on this project. This project is currently
under construction.

Contact Info of Project Owner Representatives:

Michael Cline, PE, PTOE (Commissioner - INDOT)

Phone: 317-232-5523

Email: meline@indot.in.gov

Gary Pence, PE (Project Manager - INDOT)

Phone: 317-232-5198

Email: gpence@indot.in.gov

#### US 41 Project – Wisconsin (Under Construction)

The overall goal of the US 41 Project is to improve the quality of life for the people who live, work or travel on or near this highway. To achieve this goal, WisDOT plans to build an attractive, high-quality highway that enhances the community and increases the overall safety. As part of this goal they have designed and planned to construct 40 roundabouts including several roundabout interchanges along the corridor. The multi-lane roundabout interchanges at US 41 & Breezewood Lane and US 41 & Scheuring Road are constructed and open to traffic. There are at least eight additional roundabout interchanges either under construction or planned for future construction (see below).

- US 41 & 9th Street
- US 41 & US 45
- \* US 41 & Lineville Road
- US 41 & Velp Avenue
- US 41 & WIS 29
- US 41 & Main Avenue
- US 41 & WIS 54
- US 41 & WIS 21

Contact Info of Project Owner Representatives:

Will Dorsey, PB (NE Region Director, Wisconsin DOT)

Phone: (920) 492-5684

1 1000

Email: Will.Dersey@dot.wi.gov

This e-mail address is being protected from spumbots. You need JavaScript enabled to

view it Kris Schuller, US 41 Project Communications Manager

Phone: (920) 492-4109

Email: Kris Schuller@dot.wi.gov

- I-95 & Ritchie Marlboro Road Roundabout Interchange Maryland This award winning engineering excellence multi-lane roundabout interchange has been operating successfully since 2003. The Maryland State Highway Administration has several other single and multi-lane roundabout interchanges that are successfully operating on many of their state highways (see below).
  - MD 32 & Airfield Road
  - MD 295 & Arundel Mills Blvd
  - MD 100 & MD 103 (Meadow Ridge Rd)
  - MD 216 & US 29
  - MD 32 & Bruntswood Road
  - US 29 & Hopkins Road
  - MD 100 & MD 104
  - MD 5 & MD 231
  - I-270 & MD 80

Contact Info of Project Owner Representatives:

Mike Niederhauser

Maryland State Highway Administration,

Office of Traffic and Safety, Hanover, MD

Phone: (410) 787-5879

- Several Single and Multi-lane Roundabout Interchanges Washington
  The Washington State DOT has constructed several single and multi-lane roundabout
  interchanges that are successfully operating on many of their state highway facilities (see
  below).
  - I-90 & SR 202
  - SR 16 & Bumbam Drive
  - SR 240 & Benton County
  - I-5 & Dike Access Road
  - I-82 & Valley Mall Blvd
  - US 12 & Pine Street

Contact Info of Project Owner Representatives:

Brian Walsh

State Traffic Design Engineer - Washington State Department of Transportation

Phone: 360-705-7986

### OHIO RIVER BRIDGES

East End Crossing

3

. . . .

Email: walshb@wisdot.wa.gov

Jeffrey Shaw

Intersections Program Manager - FHWA Office of Safety

Phone: 708-283-3524

Email: jeffrey.shaw@dot.gov

- Several Multi-lane Roundabouts and Roundabout Interchanges Michigan
   The state of Michigan has several multi-lane roundabouts both at grade and at the
   interchange ramp terminals that are successfully operating for past several years (see
   below). These are either under the jurisdiction of Michigan Department of Transportation
   or the local agencies.
  - I-94 & Main Street
  - US 23 & Geddes Road
  - 1-75 & M-81
  - US 23 & Lee Road
  - M-53/18 ½ Mile Road & Van Dyke Ave

Contact Info of Project Owner Representatives:

Kirk T. Steudle, P.E. (Director/Commissioner - MDOT)

Jeff Cranson, MDOT Director of Communications

Phone: 517-335-3084

Bob Felt (MDOT Office of Communications)

Phone: 989-731-5090

E-mail: felth@michigan.gov

James Lake (MDOT Office of Communications)

Phone: 906-786-1830

There are many more single and multi-lane roundabout interchanges built in several other states including, but not limited to, Colorado, Kansas, Arizona, New York, Utah, Minnesota, etc. FHWA Contact & Technical Representative for Multi-lane Roundabout Interchanges

FHWA Contact & Technical Representative for Multi-lane Roundabout Interchanges Successfully Implemented in Various States

Dr. Joe Bared - Project Manager

FHWA Turner-Fairbank Highway Research Center

Phone: (202) 493-3314 Email: joe.bared@dot.gov

(a) Description of added risks to IFA, the Department or third parties associated with implementing the ATC.

Due to the higher level of traffic safety, IFA will have a reduced risk from this ATC regarding safety to the traveling public.

 (p) Estimate of any additional IEA, the Department, Developer and bind party costs, associated with implementation of the XIC.

None

(q) Estimate of any savings and additional toll or other revenue that would accrue to IFA and the Department should the ATC be approved and implemented.

In addition to the decrease in MAP due to the reduction of construction costs and developer O&M costs, this ATC also reduces the long-term O&M costs to IFA/INDOT. Also, with the additional right-of-way that is made available from this ATC, IFA is able to utilize this area for other measures such as mitigation and / or maintenance facility thus saving the IFA the costs of procuring additional right-of-way elsewhere for these measures.

Lastly, with the revised interchange, no traffic signals and a reduction in lighting is required from the RID plan. This will reduce the utility cost to IFA/INDOT for the entire life of the interchange.

(r) Analysis of how the ATC is equal or better in speality and performance than the requirements of the RFP.

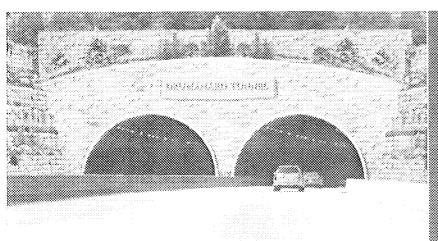
This ATC provides safety improvements, improved traffic operations, reduced environmental impact, reduced operations and maintenance costs, and reduced construction cost as compared to the requirements of the RFP. As mentioned previously in the traffic operations analysis, the ATC outperforms the RFP preliminary design. Additionally, roundabouts reduce overall vehicle emissions, unlike signalized intersections, which will result in a smaller carbon footprint for the area.

(s) Preliminary abilitysis of potential impacts on the MAP.

WVB's ATC #3 will provide a substantial reduction in construction costs of the SR 265 / SR 62 / Port Rd Interchange as well as provide a vast reduction in the Developer's maintenance cost during the O&M period. Based on the revised RFP dated June 22<sup>nd</sup>, 2012, the reduction to the MAP is estimated to be a minimum \$900,000 discount. This MAP deduction equates to a Net Present Value reduction of nearly \$17.5 Million savings to IFA. This MAP reduction is in addition to the continued maintenance savings that IFA / INDOT will realize in reduced maintenance costs throughout the lifetime of the interchange.



CONFIDENTIAL



Ohijo River Bridges Projeci Bassania dossing

(Communication (CAS)

ATC-No.3

#### Submitted to:

Indiana Finance Authority One North Capitol Avenue, Suite 400 Indianapolis, Indiana 45204 Aftention: Jacob Blasdel Telephone, 317, 234, 2213 Fax: 317.232.6786 Email Address: rfq@ifa.in.gov

### Submitted by:

WWW East End Partners

WVB East End Partners 1256 East Summit Street Crown Point, Indiana 46307 Phone: 915,707,3905



Appendix A – ARCADY8 Outputs Report (Roundabout Analysis)

### ARCADY 8

Version: 8.0.0.296 [27 Feb 2012]
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For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk

The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: ATC 3 - ORB - SR 62 & SR 265.arc8

Path: P1/2011/008861C. Calcs\_Data\Traffic Study\QC-QA Check\Arcady

Report generation date: 7/23/2012 9:56:37 AM

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- A Japantero Morawak
- Mr. Andrew
- T. Pavette Service.
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- Dire Wilks suffers, Floure
- the Material Society of the second security
- w vonest Str
- 🤏 Kabuu

### Summary of junction performance

	Queus (Veh)	Delay (5)	RFC	ros	Junction Delay (5)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (5)	rfc	LOS	Junction Delay (a)	Junction LOS	Network Residual Capacity
ES Ramps - 58 62 NB	0.77	3.83	0.44	, A				3.72	10.75	0.50	\$			
EB Ramps - SR 67.58	2.86	6.78	0.75	Ä.	5.58	A,		4,84	5.56	0.83	. A	10.15	*	
EE Ramps - SR 265 ES Exit	1.75	5.96	0.64	A	******		28%	3.23	9.62	0,77	. 2.			15%
WB Ramps - SR 62 NB	1.17	2.77	0.84	4			[WS Ramps - SR 365 W8 Exit]	3.06	5.08	5.76	4			[88 Ramps - S8 62 NB]
WE Ramps - SK 265 WB East	1.58	2.31	0.95	Å,	\$.29	Ą.	ext.;	3.12	10/91	0.93		8.28		
W8 Ramps - 5R 62 S8	1.55	6,04	0.81	Α		· · · ·		3.87	10.30	0.80				

values above settle statistics before ad the expellent Cuty is the memory value of surany delay paramong values, summa CCC and function Cuture demand engined among the Reliable Repeats indicates the company by which remains during the account of the code (see Analysis Options) is not

133 - Ciko - Ateniero En (2030), AM1 innolet diarcten: 3:09 A94 - 8:15 A94 138 - Ciko - Ateniero En (2030), PM 1 monor diarcten: 3:09 A94 - 8:15 A95

1940 Unity ARCADY 6.0-0.206 or 7/23/2012 9/56/24 AM

## File summary

File Description

Title	ORB - ATC/VE Options
Location	
Site Number	
Date	5/17/2012
Version	
Status	(new file)

Identifier
Client INDOT/KYTC
Jobnumber
Enumerator ACE\hshah
Description

**Analysis Options** 

Vehicle Langth (II) Do Greek Vanishins Calculate Casculate Cascula

### Units

Distance Units	Speed Units	Traffic Units Imput	Troffic Units Henuits	Flow Units	Average Delay Units	Total Detay Units	Ram Or Delay Units
ft	mph	Veh	Veh	perHour	8	-Min	perHour

# (Default Analysis Set) - ORB - Alternate 2b (2030), PM

Data Errors and Warnings

Severity	Area	ltem	Description
Warning	Geometry		Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	EB Ramps - SR 62 SB - Roundabout	capacities with increasing caution.

		Geometry	
Warning	Geometry	EB Ramps - SR 265 EB Exit - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Flow Arm 1	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 2	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 3	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 4	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Linked Roundabout	EB Ramps - SR 62 SB	Linked arm is using 'Closely Spaced' mode but internal storage space is 10 PCU, which may be too large. See User Guide for details.
Warning	Geometry	WB Ramps - SR 62 NB - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	WB Ramps - SR 265 WB Exit - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	WB Ramps - SR 62 SB - Roundabout	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

		Geometry	
Warning	Flow Arm 1	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 2	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 3	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 4	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Linked Roundabout	WB Ramps - SR 62 NB	Linked arm is using 'Closely Spaced' mode but internal storage space is 10 PCU, which may be too large. See User Guide for details.

Analysis Set Details

Dignie	Roundsbriot Capacity Description Model	techote in Report	Use Specific Demand Set(s)	Specific Demond Selfa)	Lesg foost	Network Plac Sucting Factor (%)	Nexwork Capacity Sessing Factor (%)	Station For Scaling Factors
(Default Analysis Set)	ARCADY	ų.				100.000	85.000	

### Demand Set Details

Stanio	Section Name	Time Period Name	Description	Trastia Prusia Type	Model Spiri Tiese (Mhanes)	Montel Finish Tires: [Fiftnend]	Model Time Priced Length (min)	Time Segment Length (mic)	Resides For Control Hour Only	Segis fime Seginent Only	Cnoked	Run Automoskody	Usu Betalonship Re	dations high
ORB - Alternate 2b (2030), PM	ORB - Alternate 2b (2030)	РМ		Varies by Arm	08:00	08:15	15	15		1		<b>√</b>		:

# Junction Network

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ن.	4.4	8.8	٠,	4.8	v	1	- 0

Jametto	i fisme	Junction Type:	Arm Order	Carada Siapear eterl	Large Rosendsbook	Do Stewartis Delay	Junction Delay (s)	Jungtion LOS
1	EB Ramps	Roundabout	1,2,3,4				10.15	8
2	WB Ramps	Roundabout	1,2,3,4				8.26	A

## Junction Network Options

Uriving Sigo	Lighting	ಟಿಂಪಡೆ ವಿಚರ್ವೆಯ	Network Ensidered Coponity (%)		First Am So whing Threshold
Right	Normal/unknown	(Mini-roundabouts only)	15	EB	Ramps - SR 62 NB

# Arms

## Arms

7 74 (1.12)	and the second of the second o	بتتعميم فتربيت بركر رززر	
Nator/	Name	Nome	Фезеприна
EB Ramps	SR 62 NB	SR 62 NB	
EB Ramps	SR 265 EB Enter	SR 265 EB Enter	i I Nasarany sa
EB Ramps	SR 62 SB	SR 62 SB	
EB Ramps	SR 265 EB Exit	SR 265 EB Exit	
WB Ramps	SR 62 NB	SR 62 NB	
W8 Ramps	SR 265 WB Exit	SR 265 WB Exit	
WB Ramps	SR 62 SB	SR 62 SB	
WB Ramps	SR 265 WB Enter	SR 265 WB Enter	

## Capacity Options

- Marine	Name	Minimum Capacity (POVM)	Maximum Copolity (FCMIN)	Augume Flat Start Padille Tueltet Gustes (PCU)
EB Ramps	SR 62 NB	0.00	99999.00	0.00
EB Ramps	SR 265 EB Enter	0.00	99999.00	0.00
EB Ramps	SR 62 SB	0.00	99999.00	0.00
EB Ramps	SR 265 EB Exit	0.00	99999.00	0.00
WB Ramps	SR 62 NB	00.00	99999.00	0.00
WB Ramps	SR 265 WB Exit	0.00	99999.00	0.00
WB Ramps	SR 62 SB	0,00	99999.00	0.00
WB Ramps	SR 265 WB Enter	00.0	99999.00	0,00

Roundabout Geometry

Name	Name	V - Appresen road half-width [fi	E - Entry width (ft)	' - Ellicetive flam bingsk (10	) R - findry contons (R)	D - Initialition pircus diagnosity (ff	) PHI - Conflict (entry) angle (deg) Exit Only
EB Ramps	SR 62 NB	24.00	39.00	150.00	100.00	250.00	30.00
EB Ramps	SR 265 EB Enter	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only 🗸
EB Ramps	SR 62 SB	24.00	28.00	150.00	100.00	250.00	30.00
EB Ramps	SR 265 EB Exit	24.00	39.00	150.00	100,00	250.00	30.00
W8 Ramps	SR 62 NB	36.00	39.00	150.00	100.00	250.00	30.00
WB Ramps	SR 265 WB Exit	24.00	28.00	150.00	100.00	190.00	30.00
WB Ramps	SR 62 SB	24.00	28.00	150.00	100.00	190.00	30.00
WB Ramps	SR 265 WB Enter	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only /

Grownerder, for Arm Clark measured opposite Arm 8. Secondaria. New Arm 8. Wieleverst, are measured opposite Arm Clark

Sypass

Name	Nanoi	Ami Nas Symus	Dypone Littlisadus (35)
EB Ramps	SR 62 NB	1	100
EB Ramps	SR 265 EB Enter		N/A
EB Ramps	SR 62 SB		N/A
EB Ramps	SR 265 EB Exit	1	100
WB Ramps	SR 62 NB		N/A
WE Ramps	SR 265 WB Exit	1	100
WB Ramps	SR 62 SB	1	100
WB Ramps	SR 265 W8 Enter		N/A

# Pedestrian Crossings

Namo	Name	Creating Type
EB Ramps	SR 62 NB	None
EB Ramps	SR 265 EB Enter	None
EB Ramps	SR 62 SB	None
EB Ramps	SR 265 EB Exit	None
WB Ramps	SR 62 NB	None
W8 Ramps	SR 265 WB Exit	None
WB Ramps	SR 62 SB	None
WB Ramps	SR 265 WB Enter	None

Slope / Intercept / Capacity

Roundabout Siepe and intercept used in model

Numie	Rático	Exter stope and intercept directly	fintered slope	Entered intercept (PCUIta)	Final Slope	Final Insertic pt (PCUIII)
EB Ramps	SR 62 NB		(calculated)	(calculated)	0.730	3320.900
EB Ramps	SR 265 EB Enter		(calculated)	(calculated)	Exit-only	Exit-only
EB Ramps	SR 62 SB		(calculated)	(calculated)	0.621	2599,868
EB Ramps	SR 265 EB Exit		(calculated)	(calculated)	0.730	3320.900
WB Ramps	SR 62 NB		(calculated)	(calculated)	0.778	3645.435
WB Ramps	SR 265 WB Exit		(calculated)	(calculated)	0.732	2599.868
WB Ramps	SR 62 SB	.,	(calculated)	(calculated)	0.732	2599.868
W8 Ramps	SR 265 WB Enter		(calculated)	(calculated)	Exit-only	Exit-only

The slope and intercept shown shows include any convections exit admissional.

# Traffic Flows

Demand Set Data Options

Gerealt Versiete Biz	Vehicle Bix Varies Gver Time	Vehicle tõiz Varios Gver Turn		Yehiole Mix Source	PEU Factor for a My (PCU)	territoria su anticipate de la companya de la compa	make Train Durning Proportions and downers - Vary Over Time	Turning Proportion: York Deer Turk	 raing Proportions long Over Entry	
		1	<b>V</b>	HV Percentages	2.00			1	ý	

# Entry Flows

General Flows Data

Borne	Mame	Profile Type	Use furning Courte	Average Demoind Flore (Vehitle)	Flow Scaling Factor (%)
EB Ramps	SR 62 NB	PHF	<b>4</b>	1775.00	100.000

EB Ramps	SR 265 EB Enter	Exit-only	1	Exit-only	Exit-only
EB Ramps	SR 62 SB	PHF	1	1600.00	100.000
EB Ramps	SR 265 EB Exit	PHF	<b>V</b>	1425.00	100.000
WB Ramps	SR 62 NB	PHF	1	2025.00	100.000
WE Ramps	SR 265 WB Exit	PHF	√	625.00	100.000
WB Ramps	SR 62 SB	PHF	1	2350.00	100.000
WB Ramps	SR 265 WB Enter	Exit-only	1	Exit-only	Exit-only

### Peak Hour Factor Data

Name	Мини	Hounty Values (Vehior)	York Hour Forder	Feak Time Segment
EB Ramps	SR 62 NB	1775.00	0.95	N/A
EB Ramps	SR 265 EB Enter	Exit-only	Exit-only	N/A
EB Ramps	SR 62 SB	1600.00	0.95	N/A
EB Ramps	SR 265 EB Exit	1425.00	0.95	N/A
WB Ramps	SR 62 NB	2025.00	0.95	N/A
WB Ramps	SR 265 WB Exit	625.00	0.95	N/A
WB Ramps	SR 62 SB	2350.00	0.95	N/A
WB Ramps	SR 265 WB Enter	Exit-only	Exit-only	N/A

# Direct/Resultant Flows

#### Direct Flows Data

Time Segment	Name	fdageco	Direct Despaid Soby Flow (Vision)	fárestőemsosiEntryPtowinPCU (FCWhr)	Olmes Demand Exit Floor (Volulis)	Birest Demand Peneralian Flex (Fedur)
08:00-08:15	EB Ramps	SR 62 NB	1868.42	2055,26	N/A	N/A
08:00-08:15	EB Ramps	SR 265 EB Enter	Exit-only	0.00	N/A	N/A
08:00-08:15	EB Ramps	SR 62 SB	1684.21	1852.63	N/A	N/A
08:00-08:15	EB Ramps	SR 265 EB Exit	1500.00	1650.00	N/A	N/A
08:00-08:15	WB Ramps	SR 62 NB	2131.58	2344.74	N/A	N/A
08:00-08:15	WB Ramps	SR 265 WB Exit	657.89	723.68	N/A	N/A
08:00-08:15	WB Ramps	SR 62 SB	2473,68	2721.05	N/A	N/A
08:00-08:15	WB Ramps	SR 265 WB Enter	Exit-only	0.00	N/A	N/A

# Turning Proportions

Turning Counts or Proportions (Veb/hr) - E8 Ramps (for whole period)

			To		
		*1	2	3	4
	*	0.000	625,000	1150.000	0.000
From	2	Exit-only	Exit-only	Exit-only	Exit-only
	3	1100.000	500.000	0.000	0.000
	4	300.000	250.000	875.000	0.000
Sam 2 is a	કોર્સ હ	aly and cause a	bowe ged stan	ed perigramen fo	g thun kept

Turning Proportions (Veh) - EB Rumps (for whole period)

			To		
		1	2	3	4
	4	0.00	0.35	0.65	0.00
From	2	0.25	0.25	0.25	0.25
;	3	0.69	0.31	0.00	0.00
	4	0.21	0.18	0.61	0.00

But I in our party and so the above god spould be ignored for this Airc.

Turning Counts or Proportions (Veh/hr) - WB Ramps (for whole period)

	To											
		1	2	3	4							
	1	0.000	0.000	1800.000	225.000							
From	2	350.000	0.000	275.000	0.000							
	3	1250.000	0,000	0.000	1100.000							
	4	Exit-only	Exit-only	Exit-only	Exit-only							

yean was and any sind so the second god should be specied for the Arm

Turning Proportions (Vah) - WS Ramps (for whole period)

	Το										
		1	2	3	4.						
ممع	1	0.00	0.00	0.89	0.11						
From	2	0.56	0.00	0.44	0.00						
	3	0.53	0.00	0.00	0.47						

### 4 0.25 0.25 0.25 0.25

Asm 4 is est with and so the word, and sticked on ignored for all their

# Vehicle Mix

Average PCU Per Vehicle - ES Ramps (for whole period)

			To		
		4	2	3	4
	4	1,000	1.100	1.100	1.100
From	2	Exit-only	Exit-only	Exit-only	Exit-only
	3	1.100	1.100	1.000	1.100
:	4	1.100	1,100	1.100	1.000
Aggs Tosk	sept t	etty sand sin Ste	antive grid sinc	iuld be ignored	Haraba Alva

Heavy Vehicle Percentages - EB Ramps (for whole period)

			To									
		*1	2	3	4							
	Ą.	0.000	10.000	10.000	10.000							
From	2	Exit-only	Exit-only	Exit-only	Exit-only							
	3	10.000	10.000	0.000	10.000							
	4	10.000	10.000	10.000	0.000							
Acres 65	ied i	กหรู สกติจิต ซิเลิ	attove god soc	រប់នេងនៅស្វានមេន	operation description							

Average PCU Per Vehicle - W8 Ramps (for whole period)

To

		1	2	3	4
	~	1,000	1.100	1,100	1.100
From	2	1.100	1.000	1.100	1.100
	3	1.100	1.100	1.000	1 100
	4	Exit-only	Exit-only	Exit-only	Exit-only

Arm's is extremity and so the above one choole as ignored for this Arm.

Heavy Vehicle Percentages - WS Ramps (for whole period)

			To		
		· W	2	3	4
	1	0.000	10,000	10.000	10.000
From	2	10.000	0.000	10.000	10.000
	3	10.000	10,000	0.000	10.000
	4	Exit-only	Exit-only	Exit-only	Exit-only
88725 ( J. )	9040	ndy gwyr o'i gher	900-18 July 1930	kala de ibracies	Terms Alex

Results

Results Summary for whole modelled period

Marge	Raine		Stox Desbry (s)	saineidheannian ?	Max 1,555	Average Demand (Velohr)	Total Junction Activals (Veh)	Total Supuding Daisy (Volumin)	Average Occording Delay (a)	Rais Of Queueing Colay (Veh-mount)	Inclusive Foral Outsucing Delay (Veh-min)	Inchesive Average Octoby (x)
EB Ramps	SR 62 NB	0.80	10.75	3.72	<u>a</u>	1868.42	302.63	49.84	9.88	199.38	50,12	9.94
EB Ramps	SR 265 EB Enter	Exit- only	Exit- only	Exit- only	Exit- only	Exit-only	Exit-only	Exit-only	oniy	Exit-only		Exit-only

EB Ramps	SR 62 SB	0.84	9.96	4.84		1684.21	421.05	64.25	9.16	256.99	64.60	9,21
EB Ramps	SR 265 EB Exit	0.77	9.62	3.23	,A 	1500.00	296.05	43.95	8.91	175.81	44.16	8.95
WB Ramps	SR 62 NB	0.76	5.08	3.04	A	2131,58	532.89	42.86	4.83	171.42	42.95	4.84
WB Ramps	SR 265 WB Exit	0.53	10.91	1.12		657.89	92.11	15.64	10.19	62.56	15.69	10.22
WB Ramps	SR 62 SB	0.80	10.30	3.87	8	2473.68	328.95	51.99	9.48	207.96	52.26	9.53
WB Ramps	SR 265 WB Enter	Exil- only	Exit- only	Exit- only	Exit- only	Exit-only	Exit-only	Exit-only	Exit- only	Exit-only	Exit-only	Exit-only

and the control of th

#### ARCADY 8

Version: 8.0.0.296 [27 Feb 2012]
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For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk

The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: ATC 3 - ORB - Port Rd & SR 265,arc8

Path: P:\2011\00886\C. Calcs\_Data\Traffic Study\QC-QA Check\Arcady

Report generation date: 7/23/2012 10:10:25 AM

- r (Befack Acrista Set Offic Atemeste le 12:39). Aft
- The agency race last sequence
- A Borns
- St. Yosario, Winner
- R Batter High-H
- to Standard Augustiniana Africa.
- M. Thursday Arabada Prabanca
- To Managing May
- Ser Black again.

### Summary of junction performance

	Queue (Veh)	Delay (s)	RFC L	œs.	Junction Delay (s)	Junction LOS	Network Residual Capacity		Queue (Veh)	Delay (6)	RFC (	.05	Delay (s)	Junction LDS	Network Residual Capacity
								waxaa Aaaaa							
Port Road NB	0.67	4.56	0.40	$\mathcal{Z}_{i_1}$			1.48%		0.72	4.79	0.42	4			137%:
SR 265 WB Exit	5.43	3.88	6.12	4	3.20	A	[Fort Read 115]		0.23	2.58	0.32	ß.	3,59	ě	(Fort Fload MS)

Values shown yet the maceum whites then obtaine suprement. Daily in the ensuring value of suproje shapper among values. Switch LOS nets among the maceum theory are demand averages, maken't Revised Capacity maken't in summing a project maken't project to the suprementation of suproject to the summing of the formation of suproject to the summing of the formation of suproject to the suprementation of supr

123 - 1248 - Albertote de (2008), Alb 1 monte distribut de 10 AB - 1315 AM 124 - 1248 - Albertote de (2008), PAI (model constant de 10 AB - 605 AB

Bus using APCRON BOX 396 or PRODUCTS 16 FOR 25 AST

### File summary

File Description

Title	ORB - ATC/VE Options
Location	
Site Number	•
Date	5/17/2012
Version	
Status	(new file)
ldentifier	
Client	INDOT/KYTC
Jobnumber	

Enumerator	ACE\hshah								
Description									

Analysis Options

Vehicle Longth (ft)	Do Castee Variation	is : Calculate Residual C	specity. Resistant Capacity Cribina Type	RFC Thursdold	Assemble finday Tineahald (2)	Queue Thousbook (PCU)
18.86	1	1	Delay	0.85	36.00	20.00

### Units

Distance Units	Special Units	Traffic Units Espot	Trottic Units Findults	Flow Units	Average Delay Units	Josef Dotay Chies	Since Of Debug Desirs
ft	mph	Veh	Veh	perHour	S	-Min	perHour

# (Default Analysis Set) - ORB - Alternate 2c (2030), AM

### Data Errors and Warnings

Severity	Area	liem	Description			
Warning	Geometry	Port Road NB - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Tre capacities with increasing caution.			
Warning	Geometry	SR 265 WB Exit - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.			
Warning	Flow Arm 1	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.			
Warning	Flow Arm 2	Analysis	Queue Variations cannot be calculated for the selected traffic profile type.			

		Options	<u></u>
Warning	Flow Arm 1-1	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 4	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm 5	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Linked Roundabout	Port Road NB	Linked arm is using 'Closely Spaced' mode but internal storage space is 10 PCU, which may be too large. See User Guide for details.

Analysis Set Details

Nana	Roundations Capacity Bescription	igakusto ja Riegiori	(Jan. Specific Beerand Serge)	Specifit: Disownd Sulfs)	4100,000	Network Flow Stating Factor (%)	Sedwork Connectly Scotling Endow (16)	Posson For Scaling Pastors
(Default Analysis Set)	ARCADY	1				100.000	85.000	

## Demand Set Details

Manate	Sic coursio francio	Time Prefed Description Bons	Tranks Protile Type		medel Finion Time (Hirkmin)	(0010)	Time Seginent Canalin (nam)	Central Fixer Only	Siegie Thus Segranti Only	Locked	Ron Kotuqusiicully	Usa Pelotionship	Resolic public
ORB - Alternate 2c (2030), AM	ORB - Alternate 2c (2030)	AM	Varies by Arm	08:00	08:15	15	15		L		✓	: : : :	

# Junction Network

## Junctions

1	(5H90	Jonichen Тури	Acro Ordin	Grade Separated	Large Re	firedenia firedenia	Do Grono	ric Dolay	Junction Delay (s)	Junetien LOS
WB I	Ramps	Roundabou	1,2,1-1,4,5						3.20	Ž,
Decement										
Jung	ction N	etwork Opti	ons							nanana . ara ala a
Otiving Si	ise	Lighting	Road S	Surface	Res	hvork Resid	hiof Capacit	y (%) - Fir	of Acro Reacting To	ni sitoiri
Righ	it Nom	nal/unknown	(Mini-round:	abouts on	v)	1	48		ort Road	NB

# Arms

## Arms

Name	Pisarne	Description
Port Road NB	Port Road NB	
SR 265 WB Exit	SR 265 WB Exit	
Port Road SB	Port Road SB	
WB CD to SR 62	WB CD to SR 62	
SR 265 WB Enter	SR 265 WB Enter	

## Capacity Options

	Machin		Минин Сарасну (РСУ/ю)	Maximum Capacity (PCUIta)	Asseme Fiel Start Profile	feiliaf Qunon (PCU)
	Port Road	NB	0.00	99999.00		0.00
3	SR 265 WB	Exit	0.00	99999.00		0.00

Port Road SB	0.00	 99999.00	0.00
WB CD to SR 62	0.00	99999.00	0.00
SR 265 WB Enter	0.00	 99999.00	00.0

## Roundabout Geometry

NO4008-	V - Approach road half-width (ft)	E - Emery solden (ff)	r - Eileative flare length (it)	R - Entry radius (H)	$\Omega$ -landershood minute districtes (0)	PHI - Conflict (entry) angle (sh	eg) Exis Daly
Port Road NB	12.00	18.00	200.00	100.00	200.00	30.00	
SR 265 WB Exit	12.00	28.00	200.00	100.00	200.00	30,00	
Port Road SB	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	: 🗸
WB CD to SR 62	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	1
SR 265 WB Enter	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	1

Securations for Ann. C are impassing approprie with E. Cart witness for Sun & 4 telephologistic me measured approprie Ann.D.

#### Sypass

and stantage	
Name	Arm Has Egyans - Bypass Utilisation (%)
Port Road NB	N/A
SR 265 WB Exit	✓ 100
Port Road SB	N/A
WB CD to SR 62	N/A
SR 265 WB Enter	N/A

## Pedestrian Crossings

Name Commonstrate
Port Road NB None

SR 265 WB Exit None
Port Road SB None
WB CD to SR 62 None
SR 265 WB Enter None

Slope / Intercept / Capacity

Roundabout Slope and intercept used in model

Marin	Ensure stops and intercept tilrecity : Codepost si	opie E	mered istersept (PCUII)	Pinal Slope	Final Interespt (PCU/hr)
Port Road NB	(calcula	ited)	(calculated)	0.546	1640.977
SR 265 WB Exit	(calcula	ited)	(calculated)	0.663	2323.156
Port Road SB	(calcula	rted)	(calculated)	Exit-only	Exit-only
WB CD to SR 62	(calcula	ited)	(calculated)	Exit-only	Exit-only
SR 265 WB Enter	(calcula	ited)	(calculated)	Exit-only	Exit-only

The slope and interest shown above include any objections and admissments.

# Traffic Flows

**Demand Set Data Options** 

Catault Values Wix Vehicle Mix		DOU Energy for a	Default Teaming	Ecolorite from Turning Proportions	Turning Proportions	Turning Propanions
Vehicle Mix Valles Over Time Valles Over Tu		MY (PCU)	Proportions	sostylasit counts Vary Goor Time	Vary Over Yorn	Vary Over Entry
<b>√</b>	HV Percentages	s 2.00			1	1

# Entry Flows

## General Flows Data

None	Profide Type	Une Terring Counts	Average beneand Flow (Vehicle	r) - Flow Scaling Paster (%)
Port Road NB	PHF	1	500.00	100.000
SR 265 WB Exit	PHF	1	1025.00	100.000
Port Road SB	Exit-only	1	Exit-only	Exit-only
WB CD to SR 62	Exit-only	<b>√</b>	Exit-only	Exit-only
SR 265 WB Enter	Exit-only	✓	Exit-only	Exit-only

## Peak Hour Factor Data

Missing	Hararly Volume (Volume)	Prof. Hour Faires	Peak Time Sugment
Port Road NB	500,00	0.95	N/A
SR 265 WB Exit	1025.00	0.95	N/A
Port Road SB	Exit-only	Exit-only	N/A
WB CD to SR 62	Exit-only	Exit-only	N/A
SR 265 WB Enter	Exit-only	Exit-only	N/A

# Direct/Resultant Flows

#### Direct Flows Data

lime Segment	Nacos:	: Direct Derrand Entry Flow (Vishar)	DanestissmandEntryPlantinFCU (FCUths)	Direct Domand Exit Flow (Veh/hr)	Oirect Demand Pedessina Pinu (Fudilu)
08:00-08:15	Port Road NB	526.32	560.53	N/A	N/A
08:00-08:15	SR 265 WB Exit	1078.95	1176.32	N/A	N/A
08:00-08:15	Port Road SB	Exit-only	0.00	N/A	N/A
08:00-08:15	WB CD to SR 62	Exit-only	0.00	N/A	N/A
08:00-08:15	SR 265 WB Enter	Exit-only	0.00	N/A	N/A

# **Turning Proportions**

Terning Counts or Proportions (Veh/hr) - WB Ramps (for whole period)

in the second second		e Sec. V. e seb		То		
		**	2	7-1	4	5
	4	0.000	0.000	0.000	325.000	175.000
م يسي	2	75.000	0.000	850,000	0.000	100.000
From	1-1	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Then 1 in its eart any and so the salare and social be ignered for this Arm Ann if its eatronly and so the above god should be ignered for this Arm Arm 6 is exit only and be the body, gife shreate on ignored for this two

Turning Proportions (Veh) - WB Ramps (for whole period)

			Ĩ	O		
		4	2	1-1	4	5
	1	0.00	0.00	0.00	0.65	0.35
	2	0.07	0.00	0.83	0.00	0.10
From	1-1	0.20	0.20	0.20	0,20	0.20
	4	0.20	0.20	0.20	0.20	0.20
	5	0.20	0.20	0.20	0.20	0.20

Auto 17 Fig. 4 of Defy and so the Tesser and shauld be ignored for this Arm Turn 4 is east only and so the wildyr and shauld be ignored for this Arm Axis 5 is eath any and so the whore and should be greened for this Arm

## Vehicle Mix

Average PCU Per Vehicle - WB Ramps (for whole period)

				To		
		-3	2	4-4	4	5
	4	1.000	1.100	1,100	1.100	1.000
	2	1.100	1.000	1.100	1.100	1.000
From	1-1	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Am. It is less agentian so me et aveigna should be groved in this Ven Is a less evir only and so me et aveigna should be griven as this Ven Am Sus exit and energy and so the elians grat should be ignored to this Am

Hexvy Vehicle Percentages - WB Ramps (for whole period)

				To		
		1	2	1-1	4	5
	***	0.000	10.000	10,000	10.000	0.000
<b>-</b>	2	10.000	0.000	10.000	10.000	0.000
From	1-1	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Alog 1-1 is exit any and so the above god should as ignored for this Arm.

Another is extractly and so the phove god should be ignored for this Arm.

Another is extractly and so the above god shouldest ignored for this Arm.

# Results

Results Summary for whole modelled period

News	Yes RFC	Max Bolay (x)	Max Queue (Veh)	no chi	Avicrouse (Semidad (Unidatis)	Yotok Junukion Amvals (Veh)	Total Queueing Onlay (Vett-min)	Average Queueing Belley (8)	Sen Of Quenting Octoy (Vehenrichte)	Inetterive Total fanoaleung Dellay (Velf min)	inclusive Average Quanting Dalay (s)
Port Road NB	0.40	4,56	0.67	Ä	526.32	131.58	9.68	4.42	38.74	9,69	4.42
SR 265 WB Exit	0.12	2.56	0.13	A	1127.97	46.05	1.93	2.51	7.71	1.93	2.51
Port Road SB	Exit- only	Exit- only	Exit- only	Exit- only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
WB CD to SR 62	Exit- only	Exit- only	Exit- only	Exit- only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
SR 265	Exit-	Exit-	Exit-	Exit-	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

WB Enter only only only

Appendix B - HCS2010 Ramp Junction Analysis Outputs Report

***************************************	RA	MPS AND	NUL PMAR	CTIONS W	ORKSH	EET	*****	·	************	
General Infor		741. 10 4 11.10	~~~~~~	Site Infor	*****	//////////////////////////////////////	************		~~~~~	
analysi		lik Shah	•	asway/Dis of Tr	***********	SR 285/E	<del></del>	•••••	***************************************	
kgency or Company		rican Structerap		nction		Port Roa				
Nate Performed	5/18/	/2012	.isi	risdiction		INDOT				
malysis Time Parice	AM F	Peak	ÁS	alysis Year		2030				
<sup>a</sup> mject Description	SR 255 & Pur	i Pead intechan	je - Objo River 6:	idoes	*****		************	****************	************	
nputs									***************************************	
histream Adj Ramp		Number of Lan	es, 14	2				***************	Downstre	ean An
		Acceleration La	ine Length, L.,	900					Ramp	
Fil Yes — Fill Or	ŧ	Deceleration L	iáe teágh t <sub>o</sub>						i Yas	€ On
FINS FIOR	ţ	Freeway Volum	ts, V₅	<b>\$00</b>					l No	Cff
		Ramp Volume,	٧	500						
<sub>op</sub> = 4259	स	<b>\$</b>	Ticsv Speed, S <sub>ec</sub>	55.0					down.	Ŕ
/	s a train	\$							V <sub>0</sub> =	vsh/h
$I_n = 1325$	/en/n	Ramp Free-Fib	w Speed, S <sub>FR</sub>	36.8					1.0	V324 (51)
Conversion t	o pc/h Un	der Base (	Conditions	£*********	***************************************		**********	**********	***************************************	
(po/h)	v (Vebár)	PHF	Terrain	%Track	%Rv	f <sub>F</sub>	ev	f <sub>g</sub>	v = V/PH	Fxtoyx(p
Preessey	800	8 92	Level	3	)	0.98	2	1.80	***************************************	904
Ranip	500	0.92	Levei	7	0	0.93		1,99	***************************************	582
UpStreem	1325	8.92	Level	8	9	0.98		1.00	***************************************	1498
DownSteam		***************************************		**********	·			******	~	***************************************
		Merge Areas				*********	Ďi	verge Areas		nnnersia sastroccoccico.
Estimation of	V12				Estima	ion of	Vyz			*********
************************	V <sub>ij</sub> = V <sub>i</sub>	(P)		***************************************	<u> </u>	***************************************		1 <sub>R</sub> + (V <sub>F</sub> - V	/P	***************************************
=		Strut iation 13-8 or	13.7)		=				197 FD 3-12 or 13-	13)
€0, <sup>≖</sup>			•		50 <sup>=</sup>		,			
<sup>)</sup> FM <sup>=</sup> '		••	on (Exhibit 13-6)		F80.00				ien (Exhibit :	13-7)
<sup>'</sup> 12 <sup>-3</sup>	984 p				V <sub>D</sub> =		•	cán		
/ <sub>3</sub>			3-14 or 33-17)		V <sub>2</sub> of V <sub>avid</sub>				i 13-14 or 13-	<b>1</b> 7)
ls V <sub>3</sub> or V <sub>5/34</sub> ≥ 2,70					ls V <sub>3</sub> or V <sub>8</sub>	<sub>334</sub> > 2,760	) politi ("	Yes € N	Q:	
is $V_3$ or $V_{2004} > 1.5$	'V <sub>2/</sub> 2 Γ γε	s i No			is Vyor V <sub>a</sub>	08 > 1.5°	V <sub>tt</sub> r2 1°	Yas € N	<b>್ತ</b>	
l Yes,V <sub>illa</sub> =	póth 13-19	(Equation 13	-16, 13-15, or		H Vas,V <sub>12a</sub>	=		c <i>l</i> h (Equati -19)	ion 13-16, 1	13-18, or
Gapacity Che	eks		*******************************		Capacii	ly Che	cks			
***************************************	Actual	Č:	paciy	LOS F?			Actual	C	apacity	LOS F?
					V <sub>j</sub>			Exhibit 1	3-8	
V <sub>FO</sub>	1486	Exhibit 13-8		No	$V_{FO} = V_{\rho}$		***********	Exhibit 10	3-8	
* 60	1400	LATTICO, ICI CI		into	***************************************	****	***********	Exhibit 1	******	<b></b>
	1			<u> </u>	V <sub>B</sub>			10		
low Enterin	g Merge Ir	ifluence A	rea		Flow E	ntering	Diver	ge Influe	nce Area	}
	Actual		eskable	Violation?	T	MARKARAKAN.	ivei 🚶	******	ssirable	Victoria
V <sub>812</sub>	1466	Exhibit 13-8	4800 AB	No	V <sub>12</sub>	1		Exhibit 13-8		
evel of Serv	ice Deteri	mination fi	f not F)			f Servi	ce Det	erminati	on (if no	t <i>F</i> )
	AAAAAAAAAAA	9.0078 V <sub>17</sub> - 9.0	******	~~~~~	***************************************	~~~~~~~	~~~~~~	3088 V <sub>14</sub> -		
) <sub>R</sub> = 11.0 (pc/m		32	75,		D <sub>H</sub> = {	ocimiilm)		1.0	- 700	
					Į.	•				
OS ≈ 9 (Exhabit	······	***************************************		***************************************	a programment and a second	Exhibit 1	*****	···	~~~~	······································
Speed Deteri	·····	***************************************		***************	Speed		***	77	***************************************	***************************************
d <sub>S</sub> = 0.276 (Ex	bit 13 4 t)				D <sub>s</sub> = {	Exhibit 13-	.12)			
	(Exhibit 13-11)				S <sub>Q</sub> = a	nph (Exhib	it 13-12)			
					5	ark Mahik	5 84 Cas			
i dom Alli = .i	Exhibit 19-411				126 B	aph (Exhib	M (3514)			
	Exhibit 13-11) (Exhibit 13-13)				<b>}</b> '	opo (Exhib oph (Exhib				

	SA:	MPS AND	ramp juno	CTIONS W	ORKSHE	ET			
General Info	~~~~	herrichten der der der der der der der der der der		Site Infan	-			***************************************	
knalyst		fik Shah	Fi	sswayiOir of Tri	900) :	3R 286/EB	•••••	***************************************	rionnoacco, vanor rionecc
kgency or Company	. Ama	nçan Sinetterept	stat, inc. Ju	nction	i	Port Road			
Date Performed	5/18	/2012	die	isdiction		NOOT			
inalysis Time Peno		Peuk		alysis Year	***************	2030		************	~~~~
roject Description	SR 265 & Pon	<u>i Road interchan</u>	gs - Obio River Br	idaas					***********
nputs		·		·····			··········		************
ipstream Adj Ramij		Number of Lan	es, N	2				Downstra	eam Adj
om av — — — miliae.		Acceleration La	me Length, L <sub>A</sub>	5000				Ranip	
FYes FO	0	Deceleration La	me Leagh L.					€ Yas	F Co
FNo FD	*	Freeway Volum		2200					****
. 140	••		7					No.	LOW
<sub>sp</sub> = 4280	A	Ramp Volume.		1176				Cown ≅	ft
×.		Frankay Free-	Flow Speed, S <sub>ee</sub>	55.0					
/ <sub>0</sub> = 1425	veh/h	Ramp Free-Pfe	w Speed, S <sub>to</sub>	35,9				V <sub>0</sub> =	veh/h
Conversion	ia nali IIn			***************************************	**********		A. 4000000000000000000000000000000000000		***************************************
***************************************	T V	7	ENN VVENTEN FERTY VAN VAN VAN VAN VAN VAN VAN VAN VAN VAN	,	<u> </u>		***************************************	******	*******
(pc/h)	(Vehitr)	PHF	Tensin	%Truck	%Ry	f <sub>ew</sub>	· · · · · · · · · · · · · · · · · · ·		IF x $\xi_{\rm NV}$ x $f_{\rm p}$
Freeway	2205	0.92	Level	8	9	0.982	1,00		2487
Ranp	1175	0.92	Level	7	į.	0.966	1.00	***************************************	1327
UpStream	1425	0.92	Level	8	1 0	9,982	1.03	***************************************	1611
DownStream	<del>-                                    </del>	1	mannannannannan varitiisist	*****	<del>}</del>	······································			********
************	*******	Merge Areas	•••••				Diverge Are	38	***************************************
Estimation o	fv <sub>t2</sub>		*******************************		Estimati	on of $v_{\psi}$	)		***************************************
				*************	<del> </del>		$V_{ij} = V_{ij} + (V_{ji} - V_{ij})$	17.18	
ند		ration 13-8 or	40° %.		_	- 33		- 87 FD 13-12 or 13-	4:01
160 <sup>2</sup> N					F60 7				*
้อม <sup>™</sup>		-	on (Exhibit 13-6)		FD =			ation (Exhibit	33-7)
/ <del>**</del>	2487				V <sub>42</sub> =		p¢/h		
7 <sub>3</sub> or V <sub>av34</sub>			3-14 or 13-17)		V <sub>3</sub> or V <sub>ava</sub> c			on 13-14 or 13	-17)
Is $V_3$ or $V_{aa38} \ge 2.7$	60 pc/h7 (° γ <sub>6</sub>	as ≅ No			is $V_2$ or $V_{av}$	$_{ m H}$ > 2.700 pc/	WI Yes I	No	
is $V_3$ or $V_{3634} \ge 1.5$					is A <sup>3</sup> or A <sup>34</sup>	<sub>34</sub> > 15 * ¥ <sub>32</sub> /	2 F Yes F		
if Yes,V <sub>era</sub> ≠		(Equation 13	-16, 13-1 <b>6</b> , br		II Yes,V <sub>12a</sub> =			abon 13-16,	13-18, or
*************	13-19	!}		***************************************	1		(3-19)	^^^	~~~
Capacity Ch	.00000000000000000000000000000000000000		***************************************	LOS F7	icapacii	y Checks	xaaaaaaaaaqaaaaaaaaa		******
***********	Actual	-	ipacky	1 808 57	CONTROL CONTROL AND ADDRESS AN	Agi		Capacity	LOS F?
	333				V <sub>E</sub>		Exhibit		
V <sub>FÖ</sub>	3899	Exhibit 13-8		Ne	$V_{EO} = V_{E}$	- V <sub>R</sub> ]	‡ Exhibit		
				1	Vg		Existi		
	1			1	***************************************	i	11		
Flow Enterin	7	ntluence A	rea	*****************	Flow En	************	verge Influ		*******************
	Actial		lesirable	Violation?	ļ	Acteat	*****	Desirabia	Violation
	3809	Exhibit 13-8	4800-A8	No.	V <sub>12</sub>	<u> </u>	Exhibit 13		
V <sub>R12</sub>	vice Deter	mination (i	f not F)				Determina		( F)
	*******	-9.6078 V <sub>10</sub> - 9.6	9827 L <sub>a</sub>			D <sub>R</sub> = 4.252	+ 0.9036 V <sub>12</sub>	- 0.009 L <sub>0</sub>	
Level of Ser	+ <b>0</b> ,99734 y <sub>n</sub> +		**		<b>1</b> .	ockničia)		••	
Level of Ser D <sub>p</sub> = 5.476	+ 0.00734 v <sub>n</sub> +	12,							
<b>Level of Ser</b> D <sub>p</sub> = 5,476 D <sub>R</sub> = 28,9 (pd	+ 0.00734 v <sub>n</sub> + mičo)	1.2			£	shibit 13.0	}		
Level of Ser D <sub>P</sub> = 5.476 D <sub>R</sub> = 28.9 (ਸਟੀ LOS = 0 (Exhib	+ 0.00734 v <sub>n</sub> + millo) ( 13-2)				1.08 ≂ (E	Exhibit 13-2		******************	*********
Level of Ser D <sub>p</sub> = 5.476 D <sub>q</sub> = 28.9 (pc/ LOS = D (Exhib Speed Deter	+ 0.99734 v <sub>n</sub> + m <sup>250</sup> ) (+ 13-2) mination				್ಣು (B Speed L	Determin.			
Level of Ser D <sub>p</sub> = 5.476 D <sub>q</sub> = 28.9 (pc/ LOS = 0 (Exhib Speed Deter M <sub>S</sub> = 0.434 (E	+0.99734 v <sub>n</sub> + mile) ( 13-2) <i>mination</i> dbt 13-11)				.08 = (E <b>Speed L</b> ರಿ <sub>s</sub> = (E	Determin. Shibit 13-12)	ation		
Level of Ser D <sub>p</sub> = 5.478 D <sub>k</sub> = 28.9 (pc/ LOS = 0 (Exhib Speed Deter M <sub>S</sub> = 0.434 (E	+ 0.99734 v <sub>n</sub> + m <sup>250</sup> ) (+ 13-2) mination				.08 = (E <b>Speed L</b> ರ್ಕ್ಕಿ = (E	Determin.	ation		
Level of Ser D <sub>p</sub> = 5.476 D <sub>k</sub> = 28.9 (pc/ LOS = 0 (Exhib Speed Deter M <sub>S</sub> = 0.434 (E S <sub>2</sub> = 49.4 mpi	+0.99734 v <sub>n</sub> + mile) ( 13-2) <i>mination</i> dbt 13-11)				:08 = (E <b>Speed L</b> D <sub>s</sub> = (E S <sub>R</sub> = m	Determin. Shibit 13-12)	-12)	•••••••••••••••••	

O - 11 - 2	**********	*****************	RAMP JUNG			*********	***************************************	*************************
General Infor	**********		***************************************	Site Infor	*****			
knayst ,		lik Shah		seway/Dir of Tr	av <i>स</i>	SR 265/W8		
Аделоу от Сотралу В Б. С. И.		essan Structurep		nches		Pert Read		
Data Performed		/2012 N		risdiction		INDOT:		
Analysis Time Perice Project Description		Paak Se tatana		isiysis Year	***************************************	2030		******************************
rraineresentesenskasterskrassen	200 5 30.06	no imeignante	- Unio raver shagi	68	*************			
nputs					~~~~~~~~	~~~~		····
Jpsheвш Аф Ramp		Number of Lan		2				(Qownstream Adj
F Yes F Or		Acceleration La	ane Leoghi, Ł <sub>A</sub>	900				Ranip
F F1916 1 1/211	<b>)</b>	Deceleration L	ana Langth L <sub>o</sub>					l'Yes Do
Fine Fior	ŝ	Freeway Volum	ne VI.	1906				ST NA CT refer
14			,					F No F Off
- <sub>eo</sub> = 1900	Ħ	Ramp Volume.	.0.	325				L <sub>doska</sub> = 81
		Freeway Free-	Flow Speed, S <sub>pp</sub>	55.0				
√ <sub>u</sub> = 925 √	ehih	Ramp Free-Fit	w Speed, S <sub>ee</sub>	35.0				V <sub>0</sub> ≃ veh/h
		J		***************************************	***************************************	************	************	
Conversion t	o pern un	ner 5926 f	zonumuns	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	·····	***************************************	·	
(pc/n)	(Veb/hr)	PHF	Tensin	Wil faich	WaRv	ha	f <sub>2</sub>	V=V/PHF x ( <sub>ey</sub> x t <sub>o</sub>
Freeway	1900	6,92	tavai	11	9	0.948	1.00	2179
Ramp	325	0.92	Level	28	.}	0.689	1.00	397
UpSicaam	925	0.92	Level	8	8	0.982	1,00	1946
DownStream		<b></b>			<del> </del>			(5)40
	J	Merge Areas	······································	i	· · · · · · · · · · · · · · · · · · ·		Diverge Area	
Estimation of	· V.a	The state of the s	******************************	***************************************	Estima	tion of v <sub>12</sub>	***************	***************************************
		V et	******************		ļ			······································
	$V_{12} \circ V_{p}$					A <sup>13</sup> -	= V <sub>R</sub> + (V <sub>P</sub> - )	
-so <sup>∓</sup>	(Eq.	ration 13-8 or	13-7)		L <sub>EQ</sub> =		(Equation 1	(3-12 or 13-13)
3 885 <sup>±</sup>	1.500	using Equati	on (Exhibit 13-6)		Fra =		using Equa	ition (Exhibit 13-7)
√ <sub>19</sub> =	2179	pc/h			V <sub>12</sub> =		poils	
V <sub>3</sub> or V <sub>auld</sub>	0 ac	In (Societion 1	3-14 or 13-17)		V <sub>3</sub> or V <sub>2×34</sub>		ech (Freath	n 13-14 or 13-17)
is V, or V <sub>2058</sub> ≥ 2.70						<sub>vos</sub> > 2,700 pc/a?		
is V <sub>a</sub> or V <sub>aves</sub> > 1.5						∞4 > 15° ∀ <sub>10</sub> ⁄2		
			-16, 13-18, or		1			ve tion 13-16, 13-18, or
HYes,V <sub>t2a</sub> =	13-19		-10, KD*KDQ OK		#Yes,V <sub>res</sub>	₩.	-µum (∈qua 13~19)	udu 19-10' 19-10' Ot
Capacity Che	cks	·			Capaci	ty Checks		***************************************
	Achai		enacijy	LOS F7	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Acius		Cepacity LOS F1
		7	nteriori de consesses estates e	***************************************	V <sub>c</sub>		Exhibit	
					*****************		***************************************	····
$V_{FO}$	2578	Exhibit 10-8		Ho	V <sub>EQ</sub> = V	- VR	Exhibit i	
					V <sub>R</sub>		5x4658.10	13-
elow Enterin	r Morna b	nfluanca A	rea		Flow F	ntering Div		onro Aras
- (O) & 4-11(4) 111				Violation?	11754 621	Actual		₹₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽
	Actual	Exhibit 13-8	Desirable 4600:Ali	1	<b>-</b>	7,103	1 .	lashable   Violation
V <sub>R12</sub>	2578	uhamamana da		Mo	V <sub>12</sub>		Exhibit 13-	
Level of Serv	*********	*********	***********		irensi d			ion (if not F)
D <sub>p</sub> ≈ 5.475 ÷	-0.08734 v <sub>8</sub> +	-0.0078 V <sub>12</sub> - 9.0	10627 L <sub>a</sub>		Ì	D <sub>R</sub> = 4.252 +	0.0086 V <sub>12</sub> -	- 0.009 L <sub>o</sub>
D <sub>a</sub> = 19.7 (pc/s	92 <b>81)</b>				D <sub>R</sub> = (	po/mi/in)		
.OS = E (Exhibit	13-2)				LOS ≈ (	Exhibit 13-2)		
Speed Deterr			***************************************		·•••••••••••••••••••••••••••••••••••••	Determinat	ใกก	***************************************
			*********************	••••••		Exhibit 13-12)	• • • • • • • • • • • • • • • • • • • •	******************************
M <sub>3</sub> = 0.309 (Ex					} ~ `		ei.	
S <sub>R</sub> ≂ 51.9 mph	(Exhibit 13-11)				<b>1</b>	nph (Exhibit 13-1		
3 <sub>n</sub> = N/A mph i	Exhibit 13-11)				[67 ]	riph (Exhibit 13-1	2)	
	(Exhibit 13-13)				<b>S</b> = :	nph (Exhibit 13-1	3}	

		RA	MPS AND	RAMP JUN	CTIONS V	ORKSHE	EET	***************************************		
General	Inforn	ation			Site Infor	mation		***************************************	COCCOCCOCCARRANA,	***************************************
Analyst	*********	Hard	ik Shah	F:	seeway Ox of Ta	3vel :	SR 266/WB		***************************************	***************************************
Agendy er C	Compasy	Āme	ncan Structures	oint, inc A	nation	3	Pod Rossi			
Oata Perforr	ned	5/18	/2012	Ú	กระบังค์ตก	3	NOOT			
Analysis Tio	ne Period	PM	resk	, A	nalysis Year	,	2030			
<sup>3</sup> rojesi Desc	cription S	R 6Z 4 SR 3	ûû interchangê -	Oho River Bridg	<del>(</del> 65	******************			**********	
nputs										***************************************
Jostisam A	di Samo		Number of Lea	ss. N	2	*****************	******************	****************	Downst	eam Adi
•	org i correspo		1 4 Societation La	onė Lenoih, L.	900				Ramp	Country 100g
l" Yes	[ On		Decaleration L	** 15					Yes	€ Oa
€ No	E Off		Freeway Voton	36, V <sub>e</sub>	1100				l No	€ Off
			Ramo Volume.	ษ	325					: 033
· <sub></sub> =	1900 ft			27					100 Sec. 21	ft
			ì	Flow Spead, S <sub>tr</sub>	<b>55.0</b>					
∕ <sub>is</sub> =	500 vet	Vh	Ramp Free-Flo	w Speed, S <sub>FA</sub>	35.0				V <sub>0</sub> =	veh/n
Conver:	sion to	pc/h Un	der Base C	Conditions	***************************************					***********************
(pc/	ii)	V (Vebbr)	PHF	Terrain	V37;uok	%Ry	1 <sub>riv</sub>	ĺ <sub>p</sub>	v = V/PI	4F x f <sub>eeγ</sub> x f <sub>p</sub>
Freeway		1100	0.92	Leval	11	9	0.948	1.00	~	1281
Валар	***************************************	325	0.92	Level	25	3	0.888	1.00		397
UpStream		500	0.92	Leval	3	1	0.982	1.00		585
DownStream	m l	***************************************	<del>                                     </del>	CO 601	·	}	*************	***************************************		200
	<u></u>		Merge Areas	CERRENDELE VALLACIONIO	.1	·	**********	diverge Area:	 S	*************
Estimat	ion of	V 4 3			***************************************	Estimati	on of v <sub>12</sub>	······································	***************************************	**************
			(5.)			<del>}</del>		**************************************	A 165	***************************************
			•••	,		1		$V_{R} + \{V_{g} - 1\}$	* / 1 (2	
184) <sup>=</sup>			ation 13-6 or			្រីលេះ		(Equation 1		•
288 <del>=</del>		1,009	using Equati	on (Exhibit M-6	)	P 50 =		using Equa	tion (Exhibit	13-7)
/ <sub>18</sub> =:		1261	pcih			V <sub>12</sub> =		pc/b		
√ <sub>3</sub> or V <sub>av34</sub>		0 pc	h (Equation 1	3-14 or 13-17	<b>)</b>	V <sub>3</sub> or V <sub>2/34</sub>		poth (Equatio	n 13-14 or 1)	3-17)
	ء > 2,760	polh71 Ye	es F No				<sub>м</sub> > 2,700 роду:	E Yes E δ	lo	
		V <sub>12</sub> /2   Ys					_ ×15*∀ <sub>0</sub> /2			
	-	50/8	(Equation 13	-16, 13-18, or		}		pc/h (Equal		13-18 or
f Yes,V <sub>12a</sub> =	<del></del>	13-19				Yes.V <sub>12x</sub> =		(3-19)		10 10,0,
Capacit	ly Chec	ks		***************************************		Capacit	y Checks			***************************************
		Astual	C <sub>i</sub>	ipacity	LOS F7		Actua		Сарвену	100 F?
						V <sub>5</sub>		Exhibe 1	3-8	
		****	ام منی بر ما			***********	- V	Extribit 1	17.2	
$V_{p}$	୍ 🛔	1868	Exhibit 13-8		No	V <sub>FD</sub> = V <sub>F</sub>		**************************************	*****	
						A <sup>K</sup>		10	13-	
	rterina	Marcali	nfluence A	rea		Flow En	tering Dive		ence Are	
Flow Er		**********					**************************************	and the same		
Flow Er		Actual	lulaix C	Désitable	Violation?	*	j Actual	Max D	esvable	4358265365
*********			Max S Exhibit 13-8	Desirable 4600 All			Actual	•	magaan	Vis/3((2)))
V <sub>R</sub> ;	2	Actual 1859	Idaix C Exhibit 13-8	Desirable 4600-All	Violation? Na	V <sub>12</sub>		Exhibit 13-	3	
V <sub>R</sub> : Level o	ız f Servi	Acilial 1858 ce Deteri	Sabit 13-8 mination (i	esitable 4608/A8 f not F)		V <sub>12</sub> Level of	Service D	Eahlbit 13- etermilmat	ion (if no	
V <sub>R</sub> : Level of	12 f Servio = 5.475 + 0	Actual 1859 ce <b>Dete</b> rn 188734 v <sub>8</sub> +	Idaix C Exhibit 13-8	esitable 4608/A8 f not F)		V <sub>12</sub> Level of		Eahlbit 13- etermilmat	ion (if no	
V <sub>Rt</sub> Level of D <sub>R</sub> =	12 f Servi = 5.475 + 0 2.6 (ps/mi/	Actual 1868 ce <b>Deter</b> (80734 v <sub>8</sub> +	Sabit 13-8 mination (i	esitable 4608/A8 f not F)		V <sub>12</sub> Level of	Service Do D <sub>is</sub> = 4,252 + 1 scimitin)	Eahlbit 13- etermilmat	ion (if no	
V <sub>R1</sub> Level of O <sub>R</sub> = 1: .os = 8	12 f Servio = 5,475 + 0 2,6 (point) 1 (Exhibit 1	Actual 1853 ce <b>Deteri</b> (00734 v <sub>e</sub> + (a) 3-2)	Sabit 13-8 mination (i	esitable 4608/A8 f not F)		V <sub>12</sub> Level of  C <sub>k</sub> = (p	<b>Service D</b> <b>Service D</b> D <sub>pt</sub> = 4.252 + 1 cimilin) (xhibit 13-2)	Exhibit 13- eterminat 0.9085 V <sub>12</sub> -	ion (if no	
V <sub>Rt</sub> Level o	12 f Servio = 5,475 + 0 2,6 (point) 1 (Exhibit 1	Actual 1853 ce <b>Deteri</b> (00734 v <sub>e</sub> + (a) 3-2)	Sabit 13-8 mination (i	esitable 4608/A8 f not F)		V <sub>12</sub> Level of C <sub>k</sub> = (p LOS = (E Speed L	Service Do Service Do Service + 1 Service Do Service + 1 Service Hall Service + 1 Service  Exhibit 13- eterminat 0.9085 V <sub>12</sub> -	ion (if no		
V <sub>Rt</sub> Level of O <sub>R</sub> = 1: OS = 8 Speed &	12 f Servio = 5,475 + 0 2,6 (point) 1 (Exhibit 1	Actual 1858 ce Deter (00734 v <sub>n</sub> + (a) 3-2) ination	Sabit 13-8 mination (i	esitable 4608/A8 f not F)		V <sub>12</sub> Level of C <sub>k</sub> = (p LOS = (E Speed L	<b>Service D</b> <b>Service D</b> D <sub>pt</sub> = 4.252 + 1 cimilin) (xhibit 13-2)	Exhibit 13- eterminat 0.9085 V <sub>12</sub> -	ion (if no	
$ \begin{array}{ccc} V_{R1} \\ Level o \\ 0_{R} = & 1 \\ 0S = & 8 \\ Speed i \\ d_{S} = & 0 \end{array} $	12 f Servio = 5.475 + 0 2.6 (point) I (Exhibit 1 Determ 1.278 (Exhi	Actual 1858 ce Detern (39734 v <sub>8</sub> + (8) 3-2) ination	Max E Exhibit 13-8 mination (i 0.0076 V <sub>12</sub> - 0.0	esitable 4608/A8 f not F)		V <sub>12</sub> Level of  0 <sub>n</sub> = (p 108 = (E Speed E 0 <sub>n</sub> = (E	Service Do Service Do Service + 1 Service Do Service + 1 Service Hall Service + 1 Service  Edition (3-) eferminat 0.0085 V <sub>12</sub> -	ion (if no		
Ver Level of De 1: OS = 6 Speed & Me 6 Se 5	12 f Servi = 5.475 + C 2.6 (pc/mir 3 (Exhibit 1 Determ 1.278 (Exhibit 1.4 mph (6	Actual 1869  Ce Detern 1.00734 v n + in) 3-2) ination ii 13-11) (x8168-13-11)	Max E Swibit 13-8 mination (i 0.0076 V <sub>12</sub> - 0.0	esitable 4608/A8 f not F)		V <sub>12</sub> Level of  C <sub>4</sub> = (p .08 = (E Speed L C <sub>4</sub> = (E	Service Do Service Do Service 13-2) Seterminati Shibit 13-12) Sh (Exhibit 13-12)	Exhibit (3) eterniinat 0.0005 V <sub>12</sub> - on	ion (if no	
V <sub>R1</sub> Level of $D_R = -1$ LOS = -8 Speed 2 $M_1 = -0$ $G_R = -0$ $G_R = -0$ $G_R = -0$ $G_R = -0$ $G_R = -0$ $G_R = -0$ $G_R = -0$ $G_R = -0$ $G_R = -0$	12 f Servii = 5.475 + 0 2.6 (polmin 3 (Exhibit 1) Determ 1.278 (Exhibit 1) 1.4 mph (6)	Actual 1858 ce Detern (39734 v <sub>8</sub> + (8) 3-2) ination	Max E Swibit 13-8 mination (i 0.0076 V <sub>12</sub> - 0.0	esitable 4608/A8 f not F)		V <sub>12</sub> Level of  C <sub>2</sub> = (p LOS = (E Speed L C <sub>3</sub> = (E S <sub>4</sub> = m S <sub>5</sub> = m	Service Do Service Do D <sub>ix</sub> = 4.252 + 1 Scimilin) Schibit 13-2) Determinati Schibit 13-12)	Exhibit 13- eterminat 0.0085 V <sub>12</sub> - on	ion (if no	Violation?

Canani lake	******************	MPS AND		************	~~~~~~~~~~~~~~	***************************************		******
General Infor	*************			Site Infor		·····	********************************	***************************************
haiyat Saanta sa Casanta		ik Shah 		eewayiDa et Tr	RVGI	SR 265AVB		
Ageisty or Collegebry National and an extensive		ricán Structurap	•	avešon Historian		SR 62		
Date Performed		2612		visdiction		MOOT		
Analysis Time Parice				rafysis Year		.2939	~~~~	**************
roject Description	SR 02 & SR 2	egnange :	Cost whet puss	<u> </u>	*************	**************	····	***************************************
nputs	~~~~~~~~~	***************************************			************		CONTRACTOR OF THE STATE OF THE	
Jo <mark>stre</mark> nth Adj Ramo		Number of Lan		3				Downstream Adj
err a		Acceleration La	we Length, L <sub>g</sub>	1900				Ramp
F Yes F Or	3	Deceleration L	me Length L <sub>D</sub>					l'Yes ("On
FNa FO	f	Freeway Volum	us. V <sub>g</sub>	2200				L No L Off
22.21		Ramp Voluma,	V <sub>o</sub>	1425				
- <sub>vp</sub> = 2200	Ä	i	ਾਲ Flow Speed, 8 <sub>se</sub>					rdosse to
	•	3		55.0				W
√ <sub>a</sub> ≈ 325 v	eh/h.	Ramp Free-Flo	w Speed, S <sub>FR</sub>	35.9				V <sub>6</sub> = veh/h
Conversion t	o ρς/h Un	der Base (	onditions		•••••			
(poh)	V	PHF	Terrain	%Truck	T %av		·	v = V/PHF x f <sub>PIV</sub> x
********************	(Vehān)	ļ		<u> </u>	1075.0	HV	· · · · · · · · · · · · · · · · · · ·	r - vicin x my x
Fineway	2200	0.92	Level	13	0	0.939	1.00	2547
Rang	1425	0.92	Level	3	6	0.982	1.00	:611
UpStream	325	0.92	Leval	75	0	0.889	1.00	397
DownStream				}	1			
***********		Merge Areas	*************			*************	Diverge Area	\$
Estimation o	V12				Estimat	tion of v <sub>12</sub>		
***************************************	V <sub>13</sub> = V <sub>2</sub>	(P)	***************************************	***************************************	<u> </u>	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	= V <sub>F</sub> + (V <sub>F</sub> - )	VP
-	,,,	ivianida-6 or iation 13-6 or	સેવ. જાય			. 13		
-80 <sup>=</sup>					-60 =		• •	(3-12 or 13-13)
em e	1,000	using Equati	on (Exhibit 13-5	}	P <sub>eg</sub> s		using Equa	tion (Exhibit 13-7)
Vn=	254?	pc/h			V <sub>12</sub> =		pc/h	
√ <sub>3</sub> .0€ V <sub>av34</sub>	9 pc/	h (Equation )	3-14 or 13-17	<b>&gt;</b> -	Valor Vavis		pc/n (Equatio	n 13-14 er 13-17)
la V <sub>3</sub> or V <sub>aute</sub> = 2,70	ld polh? ('' γ∈	is∃" No			is V, or V.	× 2.760 polit	PT Yes C N	io.
ls V <sub>a</sub> or V <sub>sola</sub> > 1.5							TYes TN	
			-16, 13-18, or		ł ·			eo boa 13-16, 13-18, or
{ Yes,V <sub>12a</sub> =			70, 10 10, 01		I Yas,V <sub>12a</sub>	÷	13-19)	een ro-ng ro-ng gr
Capacity Che	cks				Capacii	ty Checks		######################################
***************************************	Actual		epacity	LOS F7	0,000,000,000,000,000	Acti	ra!	Capacity LOS
		T	**************	7	V.		Exhibit 1	***************************************
		1		1	- percencence constru	<del></del>	***************************************	
$V_{EO}$	4158	Exhibit 13-8		No	$V_{EQ} = V_{g}$	- x81	Exhibit 1	
					V <sub>B</sub>		Exhibit 16	13-
Flow Enterin	a Marca Ir	Muanca A	raa		Elon E	ritorios Pú	verge Influ	ones Ares
HAVE LINES STA	&	Harrie A	r wa Yaokukia	Challes 2	2 1044 E3	····y·························		CAN COMPANIED CONTRACTOR OF THE PROPERTY OF TH
	Action	1 1	esirishie	Violation?	<b></b>	Attuel		TOTAL STREET,
V833	4153	Exhibit 13-8	4808-AB	No	γ.2. V(2		Exhibit 13.1	
Level of Serv	**************************	<b>^^^^</b>	******************	***************************************	Level o	***************************************	***************************************	ion (if not F)
D <sub>B</sub> = 5.475 -	-0.00734 v <sub>R</sub> +	0.0078 V <sub>32</sub> - 0.0	0627 L <sub>k</sub>			$D_{\rm p} = 4.252$	+ 9,0066 V <sub>12</sub> -	- 0.009 L <sub>o</sub>
0 <sub>g</sub> = - 27.8 (pc/s	ระสัก)				D <sub>R</sub> = {	bcimithn)		
.OS = C (Exhibit	•				1	Exhibit 13-2)		
				***************************************	****************		*****	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Speed Deteri	umation			**********	a françoississississis	<u>Determina</u>	uon	***************************************
И <sub>з</sub> = 0.465 (Ех	(b); 13-11)				D <sub>2</sub> = {	Exhibit 13-12)		
S <sub>e</sub> ≃ 49.0 mph	(Exhibit 13-11)				S <sub>R</sub> = 8	uph (Exhibit 13-	12)	
	Exhibit 13-11)				1.	nph (Exhibit 13-		
	alamentari Permi Sigil				1 "		•	
24	(Exhibit 13-13)				B + 8	non (Exhibit 13-	573	

	RA	MPS AND	NUL PMAS	CTIONS W	ORKSHI	EET	*****	***************	95 <b>44</b> 53 <b>455</b> 00000000000000000000000000000000000	
General Infori		************	*****	Site Infor		******	**********			
inalyst	**********	ik Shas	F.5	eswayiOirof Tr	evei	SR 785/	WB		*************************	
igency or Company	Ame	egan Structurep	oint, inc Ju	nction		58.62				
late Performed	5/18/	7012	<b>.</b>	risdiction		EQQWI.				
kralysis Time Pentd				віуяв Уевт		2035				
roject Description	9R 62 & SR 26	35 Interchange -	Otto River Energ	58		*****		************	******************************	
nputs	***************************************		~~~~	******	*******	************	***********	***************************************	****	
lpstream Adj Ramp		Nomber of Lan Acceleration La	**	2 1500					Downstream Adj Ramp	
∏Yes ∏On		Deceleration L		*1,01,03					l'Yes ton	
FNo FO#		Freeway Volun	ne, V <sub>s</sub>	1400					F No T Off	
- <sub></sub> = 2200 :	1	Ramp Votume,	- 1	1325					-severi = 18	
/ <sub>a</sub> = 325 ve	h <i>l</i> tí	Presway Free-Fig Ramp Free-Fig	Flow Speed, 3 <sub>57</sub> w Speed, S <sub>ee</sub>	55.0 35.0					√ <sub>o</sub> = veh/h	
Conversion to		1		TO M				************	1	
(pch)	V (Vohilis)	PHF	Terrain	WTruck	PARV.	j	HV		v = V/PHF x f <sub>HV</sub> x f <sub>p</sub>	
Freeway	1400	0.92	Leval	33		0.9	39	1.00	1621	
Ramp	1325	0.92	Level			0.9	our construction of the	1.00	1498	
JeSkeani	328	0.92	Level		<u> </u>	9.8		1.00	397	
JownStream		<b> </b>	7214)		<del></del>				-201	
× × × × × × × × × × × × × × × × × × ×	***************************************	Merge Areas	***************************************	<b></b>	<u> </u>	~~~~~~~	 i0	verge Areas	orkonomiaesissuurusuurusuurusuurusuurusuurusuurus	
stimation of		<u>, , , , , , , , , , , , , , , , , , , </u>		*****************	Estimation of v <sub>12</sub>					
***************************************	$V_{ij} = V_{ji}$	{P <sub>su</sub> }	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	***************************************			V <sub>ij</sub> ≠V	(g. + (Vy - V	, , , P = 0	
**************************************		ation 13-8 or	13-7)		-so =		(1	Equation 1:	3-12 or 13-13)	
es Ent.	, ,		on (Exhibit 13-6)		P <sub>85</sub> =				ion (Exhibit 13-7)	
εμ / <sub>39</sub> =	1621		Car (Exhibit rora)		V <sub>12</sub> pc/n					
1.6		*	0.34 40.35							
/ <sub>3</sub> or ∀ <sub>2/34</sub> ( M = M = 27			3-14 or 13-17)		V <sub>2</sub> or V <sub>2021</sub> poin (Equation 13-14 or 13-17) is V <sub>3</sub> or V <sub>2021</sub> > 2.760 point?   Yes   1 No					
Is V <sub>1</sub> or V <sub>av34</sub> > 2,76					1					
ls V <sub>3</sub> or V <sub>2V34</sub> > 1.5 <b>*</b>					is V <sub>3</sub> or V <sub>5</sub> ,	<sub>34</sub> > 1.5 '		Yes I N		
(Yes,V <sub>12a</sub> =	13-19	<u>)</u>	-15, 13-18, or		f Yes,V <sub>12s</sub> 1		13	-19)	ion 13-16, 13-18, or	
Capacity Che	cks				Capacit	y Che	cks	**********		
	Actual		apacity	108 F?			Actual	()	lapacity LOS F3	
					V <sub>F</sub>			Exhibit N	3-8	
$V_{ee}$	3119	Exhibit 13-8		No	$V_{FO} = V_{F}$	- V <sub>E</sub>		Exhibit 1	3-8	
***	21.48	1		(30.0)		·····	************	Exhibit 1	1	
		1	<del>77171777777777777777</del>		V <sub>R</sub>		***************************************	10		
Flow Entering	ı Merge İr	ifluence A	rea		Flow Er	iterin	g Diver		ence Area	
	Actual	Max C	besitable	Viplation?		À	ctual	Mex Or	isitalde Violation?	
V <sub>€12</sub>	3119	Exhibit 13-8	4600;48	No	V <sub>32</sub>	-		Exhibit 13-8		
.evel of Serv	ice Deteri	nination (i	f not F)		Level of Service Determination (if not F)					
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	*****	0.0078 V <sub>17</sub> - 0.6	********		<b>У \$1000000000000000000000000000000000000</b>			0086 V <sub>12</sub> -	arrante de la communicación de la company de la company de la company de la company de la company de la company	
) <sub>g</sub> = 19.7 (poin		331	75		1	ac/millin		17	O'	
OS = B (Exhibit					LCS = (Exhibit 13-2)					
MARAAAAAAAAAAAAA	-	*****************		************	njerius mumum	***************		66666666666666666666666666666666666666	***************************************	
Speed Detern	**********	***************************************	~		Speed L			11		
d <sub>8</sub> ≈ 9.304 (Ex	bit 13-11)				1 .	Exhibit 13				
$\delta_{ m q} = -61.0   m mph$ :	Exhibit 13-11)				Sg= n	opti (Exhi	bit 13-12)			
•	Exhibit 13-11)				S <sub>0</sub> = H	ph (Exhi	bit 13-12)			
	Exhibit 13-13)				3 = mps (Exhibit 13-13)					
3 = - 51.0 mp6 :	page 1000 to the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of t				§C) ™ 16	4333 441 744	0.06 0.0 1.00			

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General Info	rmation			Site Infor	mation							
Analyst		fix Shah	5	reeway/Dir of Tr	svei	38 265	VER					
gency or Company	/ Ame	mcan Structurep	Shit, Rec. J	unction		SR 82						
Pate Performed		/2012		of adiction		MDOT						
Analysis Time Penod AM Peak			*********	inalysis Year	*****	2039				***************		
roject Description	SR 52 8 SR 2	65 Interchange -	Chio River Brid	<u> </u>		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		·	*****	*******************		
nputs		·γ······					********	~~~~	~~~	***************************************		
Upsteam Adj Ramp Number of Lanes, N Acceleration Land Length, L				2					Downstrea Ramp	n Adj		
Yes	Oe .	Deneleration L		1500					€ Yes	⊟ Oa		
F No. 1	" Off	Freeway Volum	ie, V <sub>ji</sub>	2100					i No	in off		
<u> </u>	ft	Ramp Volume,		1325					i Orași	4500 B		
,		Freeway Free	Flow Speed, S <sub>ce</sub>	<b>65.</b> 0								
	/en/h	Ramp Free-Fic	* * * * * * * * * * * * * * * * * * * *	35.0					V <sub>0</sub> =	500 vehá		
Conversion	to pc/h Un	der Base C	onditions		g	****	******	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	*****	************		
(pc/h)	(Veh/ssi	PHF	Tenah	%Truck	%Rv		i <sub>ev</sub>	Į <sub>s</sub>	v = WPHP :	K I <sub>HV</sub> × I <sub>p</sub>		
reeway	2100	0.92	Level	10	]		952	1.00	235	7		
Ramp	1325	0.92	l.eval	<u> </u>	]		962	1,60	# # # # # # 1	8		
JpStream				~~~					**************************************	***********		
NawaStream	500	<u> </u>	Leval	3	0	<u> </u>	962	3.00	56	j		
F. 48 12 48 15 1 2	£ . :	Merge Areas	**************	*************	P** : 2 C			liverge Areas				
stimation o	4 V 12			~~~~	Estima	o non	1 V <sub>12</sub>		~~~			
	V <sub>12</sub> = V <sub>2</sub>	$\{P_{p_{N}}\}$					V <sub>12</sub> =	$V_{\rm g} + (V_{\rm F} - V_{\rm f})$	d₽ eo			
éq =	(Equ	ation 13-3 or	(3-7)		-EQ." (Equation 13-12 or 13-13)							
FM F	usino	Equation (E	dibit 13-6)		P <sub>ED</sub> = 1,000 using Equation (Exhibit 13-7)							
10° ±	path.		,		V <sub>2</sub> ≠ 2397 pc/s							
72 3 01 V <sub>ax04</sub>	•	(Equation 13-	(4.av 13-17)		V <sub>3</sub> of V <sub>6/34</sub> 0 pc/h (Squation 13-14 or 12-17)							
o ==   avos 5 V <sub>q</sub> or V <sub>au34</sub> > 2,7	-					>27		i Yes E No.	/U .~ U(	1-2-111		
7 13 ° 12√34 1 ° 60 ≲ V <sub>3</sub> or V <sub>2√34</sub> ≥ 1.5					, ,							
		ss : :ve (Equation 13-	48 13-18 or		is V <sub>3</sub> or V <sub>2/3</sub> : > 15 * V <sub>19</sub> 2   1 * Yes   1 * No pc/h (Equation 13-16, 13-18, or 13							
Yes,V <sub>sãa</sub> ≥	13-19		au, ra-ro, oc		FYes,V <sub>12a</sub>	22		кон (Сорбанон 9)	10110, 101	(a, a) (a)		
Capacity Ch	ecks	****************	**********	***************************************	Capaci	v Ch			*************	**********		
***************************************	Actual	ः	eeeeeey pacity	LOS F?	docecoodeoiooesoo	\$200000000	Actual	ಾ	0304V	108 F		
*******************			*******		V <sub>F</sub>		2397	Exhibit 13-8	**************************************	No		
$V_{\mathcal{EG}}$	•	Exhibit 13-8		Back Control	V <sub>EG</sub> = V	********	899	Exists 13-5	···	No		
*89		12.00			- Indicate a control	***************************************				~ <del>_</del>		
	1		700000000000000000000000000000000000000		V <sub>0</sub>		1498	Exhibit 13-1		i No		
Flow Enterin	anganinan		THE RESERVE AND PROPERTY OF THE PERSON NAMED IN	Mandain	Flow E	and the same	****************	rge Influen	***************	********		
	Astual	**********	esitable	Violation?	ļ	<u>y</u>	Astusi	Max Desirat	Annual Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contract of the Contrac	Yiclation'		
V <sub>R12</sub>	1	Existit 13-8	•		V12		2397	Exhibit 13-8	4400;AII	No		
Level of Sen	·····	*****	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	·····	Level o	NAME OF TAXABLE PARTY.	MARKETON OF THE PARTY OF	terminatio.	-	?)		
$D_{R} = 5.475 + 0$	).00734 v <sub>R</sub> +	0.0078 V <sub>12</sub> -	0.00627 L <sub>A</sub>			08 = 5	1.252 + 0	:0086 V <sub>12</sub> - 0.	609 L <sub>D</sub>			
l <sub>e</sub> = (pc/mili	6)				D <sub>R</sub> = 1	14 (pc	áni/la)					
DS = (Exhibit	(13-2)				l .	(Exhi	off 13-2)					
Speed Deter	mination			***************************************	Speed	-		<i>D11</i>	***************************************	***************************************		
A <sub>3</sub> = (Exibit)		***************************************		~~~	), = 0	.663 (E	xhibit 13	-12}	***********			
	hibit 13-11)					7.7 mpt	(Exhibit	13-12)				
	hibit 13-11)				1		(Exhibit					
	hibit 13-13)				1	•		•				
ga managa ye					S = 47.7 mph (Exhibit 13-13)							

		2886C5	S AND RAN		~~~~~~~~~~~	16/1/S								
General Infori		·	~~~~	Site Infor				***************************************	*********					
in <b>al</b> yst		III Suah		reeway/Da of Tr										
igency or Company		rican Sinintere		unction		S# 62								
Jale Performed		/2012		uristiction		HOCH								
inalysis Time Perket	*****************	Poat.	*****	naiysia Year	*********	3030			***************	Caratana da da da da da da da da da da da da da				
roject Description	SR 62.6 SR 2	35 Interchange	- Ohla River Brid	185		******	****	******	**********	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
nputs		**************	(*************************************		*************	******	******	***********	***********					
Upstream Anj Ramp Number of Lanes, N Acceleration Cane Length, U,									Downsto Ramp	eam Adj				
TYES TON Deceleration Cans Length Lo									ill Yes.	E On				
F No F	Off	Freeway Volu	me, V <sub>p</sub>	3600					I No	∏ Off				
ნ <sub>იბ</sub> ≃ ჩვ	$\nu_{i} \nu_{j_{ij}}$	1425					L <sub>Join</sub> , =	4500 H						
•		3	-Flow Speed, S <sub>ep</sub>	55,0										
	eh/h		low Speed, S <sub>ex</sub>	35.0					V <sub>O</sub> =	1175 ve				
Conversion to	o pc/h Un	der Base,	Conditions		<del>,</del>				~ <del>~~~~~~~</del>					
(pc/h)	V (Velvita)	PHF	Terrain	%Trock	%Rv		47	fp	v ≈ V/PH	IF x f <sub>ev</sub> x :				
Freeway	3600	9.92	Level	10	j ()	0.9	92	1.60		4109				
Кавър	1425	0,92	l.ével	3	0	9.9	62	1.60	]	1611				
JpStream			*****							***************************************				
JownStream	1175	0.92	Level	8	0	0.8		1.60		1328				
diantament and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second and a second a second and cond and a second and a second and a second and a second an	nanannanahannahan	Marge Areas			**************	***************************************		liverge Areas	***********					
istimation of	'V <sub>12</sub>				Estintat	ion of	V12							
	$V_{1\gamma} = V_{4}$	. ( P 1	***************************************		<b>,</b>	****		: V <sub>2</sub> , + (V <sub>2</sub> , - )	7. \P.	***************************************				
			क्षेत्र केंग्र											
≅Q <sup>™</sup>		ation 13-6 or	•		1									
) ਇੱਕ <sup>ਵ</sup>	HSIDQ	Equation (	Exhibit 13-6)		Fig. 1.000 using Equation (Exhibit 13-7)									
12 =	pc/in				V <sub>12</sub> = 4109 pc/h									
′ <sub>3</sub> or V <sub>sv34</sub>	po/h	(Equation 13	-14 or 13-17)		V <sub>2</sub> et V <sub>sc34</sub> 0 pc/h (Equation 13-14 or 13-17)									
la V <sub>al</sub> or V <sub>rusa</sub> > 2,70	θ po/87 (* γ <sub>6</sub>	ss. € No.			is V <sub>n</sub> or V <sub>n</sub> ,	$_{\rm res} \ge 2.70$	0 pd/h2 }	Yes I No	)					
Is V <sub>a</sub> or V <sub>eves</sub> > 1.5 f					1			⊤Yes F″Na						
1 Yes V <sub>122</sub> =		(Equation 13	-16, 13-18, or		1 Yes, V <sub>186</sub> :	•	Ę	ic/h (Equatio 9)		3-18, or 1				
Capacity Che	cks		***************************************	**********	Capacit	y Che			***********					
	Actual	<del></del>	apacity	108 F7	danalaniania	50000000000000000000000000000000000000	Actual		Sapacity	203				
****				on monoconomico	A <sup>s.</sup>		4109	Exhibit 13	· · · · · · · · · · · · · · · · · · ·					
					************				***************************************	***************************************				
$V_{FO}$		Exhibit 13-8			V <sub>FO</sub> = V <sub>E</sub>	= V3	2498	Exhibit 13	***************************************	145				
					V <sub>R</sub>		1611	Exhibit 13-	-10 2000	) No				
Flow Entering	a Merae L	nfluence A	i <i>rea</i>		Flow Er	nterin	ı Dive	rge Influe.	nce Area	? ?				
	Actual		Desirable	Violetion?	-	-	olual	Max Desi	~~~~~~~~~~	Violatio				
٧ <sub>6:3</sub>		Exhibit 13-8	***************************************	***************************************	V <sub>t</sub> y	antimu.	108	Exhibit 13-8		*****				
	ian Dotne		if and El		************	on francisco	**********	<u> </u>		mmm				
evel of Serv					Level of Service Determination (if not F) $D_{\alpha} = 4.252 + 0.0098  \text{V}_{, \alpha} - 0.009  \text{L}_{\alpha}$									
1) = N 2 / N A C	BB124 A B 4	- 0.6978 V <sub>12</sub>	- 61006X1 TA		3	<i>U</i> <sub>R</sub> ≈ 4.	252 <b>≠</b> Q	1.6086 A <sup>15</sup> - 1	a.999 L <sub>D</sub>					
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Indiana Finance Authority One North Capitol, Suite 900 Indianapolis, IN 46204

August 16, 2012

Sidney Florey, Project Executive WVB East End Partners 1260 East Summit Street Crown Point, Indiana 46307

RE: East End Crossing RFP, ATCs WVB #1, #2, #4 and #8

Dear Mr. Florey:

The Indiana Finance Authority ("IFA") has reviewed Alternative Technical Concepts ("ATC") nos. WVB #1, #2, #4, and #8 submitted by WVB East End Partners on August 2 and 3, 2012 in response to the Request for Proposals for the East End Crossing issued by the IFA on July 31, 2012 (as amended, the "RFP").

IFA's responses to the referenced ATCs are included in Attachment 1.

IFA appreciates your continued interest in the East End Crossing project.

Sincerely,

Jacob Blasdel IFA Project Manager

Attachment

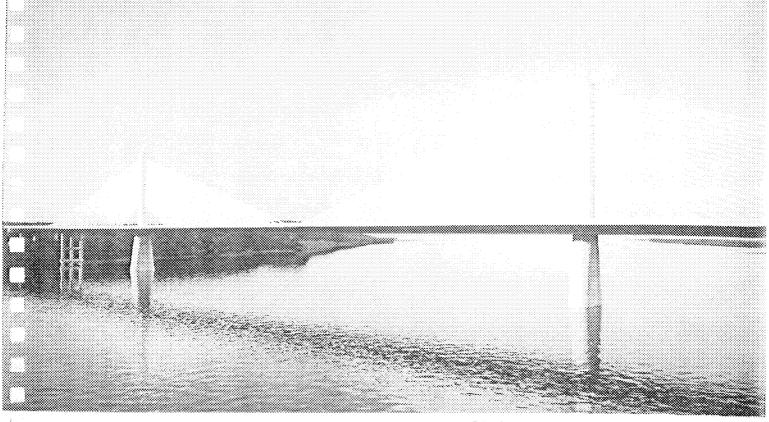
#### ATTACHMENT 1

#### WVB East End Partners

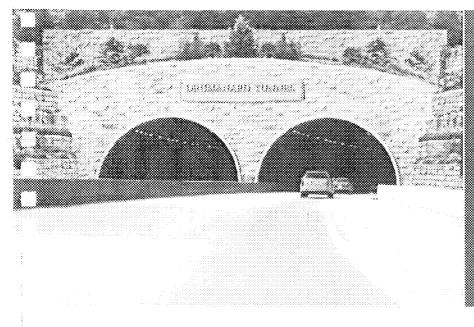
August 16, 2012

- 1. ATC WVB # 1 The ATC does not qualify as an ATC and may not be included in the Proposer's Proposal.
- ATC WVB # 2 -- The ATC does not qualify as an ATC and may not be included in the Proposer's Proposal.
- 3. ATC WVB # 4 The ATC is acceptable for inclusion in the Proposal with the following conditions:
  - Developer shall be responsible and bear the schedule and monetary risk of any modifications to any Environmental Approvals required for or arising out of this ATC.
  - Developer shall be responsible and bear the schedule and monetary risk of any new or modified Governmental Approvals required for or arising out of this ATC.
  - Developer shall be responsible for all offsite roadway improvements as required by the local jurisdictions.
  - Déveloper shall be responsible for all public outreach and coordination with neighborhood associations and other public entities.
  - Any termination or cul-de-sac required for Brookhollow Way shall be accomplished outside of the Project ROW.
- 4. ATC WVB #8 The ATC is not acceptable for inclusion in the Proposal.

Please note that previously requested clarifications for ATC WVB #1 and ATC WVB #2 are no longer required because of the above responses. If the Proposer wishes additional clarifications regarding ATC WVB #4, the Proposer may provide a written request for clarification under <u>Section 2.3.1</u> of the ITP.



CONFIDENTIAL



# Ohito River Eridges Project Die Fasit End Gossing Confidential ATCs

ATC No. 4

#### Submitted to:

Indiana Finance Authority One North Capitol Avenue, Suite 900 Indianapolis, Indiana 46204 Aftention: Sarah Rubin Telephone: 317.234.7701

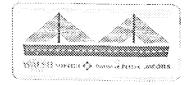
Fax: 317.132.6786

Email Address: rfq@ifa.in.gov

## Submitted by:

VVV Cast Encl Partners

WV8 East End Partners 1260 East Summit Street Crown Point, Indiana 46307 Phone: 335,207,3905



WVB East End Partners (WVB) submits the following ATC to IFA for review and approval per the requirements of the East End Crossing ITP.

#### PART 1: OVERALL DESCRIPTION OF THE ATC

(a) Sequential ATC number identifying the Proposer and the ATC number

#### **WVB** East End Partners

### ATC #4 Section 6 Brookhollow Way Alternate Route

(h) Description and conceptual drawings of the configuration of the ATC, including necessary design exceptions and a traffic operational analysis, if applicable.

#### Conceptual Drawing on Page 2

1

The preliminary design proposed in the RFP requires Brookhollow Way to be realigned to fit between the proposed piers under the new SR 265 Bridge over Lentzier Creek. The realignment starts just west of Boulder Court, and then Brookhollow Way is to be relocated to tie into Brookview Drive. The existing Brookhollow Way pavement, along with the existing 3 barrel concrete box culvert, is to be removed within the limits of the realignment. A new bridge on Brookhollow Way is to be built over Lentzier Creek but under SR 265.

WVB East End Partners (WVB) proposes that an alternative access road be provided to the Boulder Creek Subdivision in order to eliminate the need for construction of a re-aligned Brookhollow Way and eliminate the need for construction of a new bridge on Brookhollow Way over Lentzier Creek under SR 265. This alternative access would be provided by coordinating with the Crystal Springs Subdivision developer to construct a new roadway connecting Boulder Ridge Drive to Patrol Road as depicted on the attached conceptual drawing. The proposed roadway would be located in such a way to minimize the environmental impacts to the existing wooded areas in its vicinity, will utilize most of the footprint of the recently platted right-of-way within the subdivision, and avoid the existing utility lift station. The new roadway would be designed to the same roadway design criteria as that required for Brookhollow Way and as coordinated with the current subdivision developer and River Ridge Development. Brookhollow Way would be removed under SR 265 and terminated on each side of new SR 265 with a cul-desac on the south side and a horizontal curve connecting to the existing Coyote Court cul-de-sac on the north side. The new right-of-way and future maintenance responsibilities for this alternative access roadway would be transferred to the controlling local agency which we believe would be Jeffersonville. The tie-in to the existing and proposed plotted subdivision roads will be coordinated with the developer and, in the future, will allow for dual egress to both Patrol Road and New Chapel Road.

There are two main reasons that have further developed the need for this ATC; maintenance of traffic for Brookhollow Way and future widening of structure 11/12. With the proposed Brookhollow Way and existing Brookhollow Way crossing the existing creek at nearly the same

tocation and approximate 6 ft elevation difference, it will make it impossible to allow for uninterropted traffic without immense temporary impacts to the existing floodplain and stream with a temporary bridge crossing that is off-line of the proposed and existing alignments. The RID layout of Brookhollow Way runs in-between the proposed piers of the mainline 265 structures 11 & 12. This layout does not allow for any space for a widened bridge pier for the mainline structure towards the median and would then require bridge widening to the outside which would further impact the existing floodplains, stream, wetlands and right-of-way.

#### (c) ATC locations and Explanation of how the ATC will be used on the East End Crossing

The location of the ATC is shown on the attached conceptual drawings and described above. The ATC will be used to remove construction of the Brookhollow Way Bridge over Lentzier Creek under SR 265 and the associated roadway realignment of Brookhollow Way. The exact location of the realigned Brookhollow Way will be coordinated with the subdivision developer and River Ridge Development to limit impacts to the environment, local community and utilities.

#### PART 2: DISCUSSION OF CHANGES FROM THE ATC

#### SUMMARY OF CHANGES FROM ATC

	(d) Readway Operations	(e) Capital Maintenance	(f) Handback Requirements	(g) Life of item	(h) Reduction in Completion Time
**********	No	No	No	No	Mo

(d) Description of changes in roadway or operations regularments associated with the ATC, including case of operations.

There would be no direct change in roadway operations associated with the ATC because Brookhollow Way is not included within the operations and maintenance limits of the project.

(v) Description of changes in routine or capital maintenance regulrements associated with the ATC, including ease of maintenance.

There would be no change in routine or capital maintenance requirements associated with the ATC for Brookhollow Way as it is not included within the operations and maintenance limits of the project. However, with the removal of the Brookhollow Way Bridge, the 265 maintine bridges, 11 & 12, will be able to be designed and constructed for a more cost-effective bridge to limit bridge dark size and lower maintenance costs for the Developer and IFA after handback. Additionally, with removal of the local road underneath mainline 265, it will decrease the concerns of having meterists and pedestrians underneath the mainline bridge and increase the ease of maintenance for the mainline structure.

(f) Description of changes in Handback Requirements associated with the ATC

There would be no change in the handback requirements associated with the ATC because Brookhollow Way is not included within the operations and maintenance limits of the project,

(g) Description of changes in the unticipated life of the item(s) comprising or affected by the ATC.

There would be no change in the anticipated life of the items comprising or affected by the ATC because the new roadway would be designed to the same roadway design criteria as that required for Brookhollow Way in the RFP.

(h) Description of any reduction in the time period to reach Substantial Completion resulting from implementing the ATC, including, as appropriate, a description of method and commitments.

The ATC will allow for construction of the alternate Brookhollow Way connection prior to construction of mainline 265 which will allow for 100% uninterrupted access for Brookhollow Subdivision. This will remove the maintenance of traffic disruption to the local communities and residents and allow for faster completion of all bridge and roadway work near the Brookhollow subdivision. The overall time period to reach Substantial Completion will not be effected in any way and no additional time will be required due to this ATC.

#### PART 3: ATC ANALYSIS AND JUSTIFICATION

(i) References to requirements of the RFP which are inconsistent with the proposed ATC, an
explanation of the nature of the deviations from said requirements, and a request for approval of
such deviations.

Technical Provision (TP) 8.2.1 Table 8-3 Structure Table lists a Bridge at 4+68.21 – 8+67.66 "LS-5" as an anticipated waterway with a wet bridge crossing for Brookhollow Road over Lentzier Creek. WVB requests approval for elimination of this requirement of the RFP.

TP 9.2.2 item 8 states that the Developer shall not eliminate any traffic movements outlined in the Design Requirements (Section 9.3). WVB requests approval for elimination of the traffic movement on Brookhollow Way across the SR 265 right-of-way.

TP 9.3.2 item 4.b states that Brookhollow Way shall be realigned starting at Boulder Court and travel to the west on a new bridge over Lentzier Creek and under SR 265 before connecting with the north side of the Brookview Drive loop. The east side of the Brookview Drive loop shall be removed and the cul-de-sac on the east corner of Brookview Drive shall be reconstructed. Brookhollow Way shall remain operable to at least one lane of traffic throughout construction. WVB requests approval for elimination of all of those requirements of the RFP.

TP 9.3.2 Table 9-2 Project Limits for the Indiana Approach requires Bridge No. 13 – Brookhollow Way over Lentzier Des # TBD at Sta. 4+68.23 to Sta. 8+67.66 "LS-5" and requires Brookhollow Way from Sta. 0+50.00 to Sta. 15+19.31 "LS-5". WVB requests approval for elimination of these requirements of the RFP.

TP 9.3.4 Table 9-30 provides required roadway design data for Brookhollow Way (Line "LS-5"). WVB requests approval for elimination of this requirement of the RFP as it pertains to Brookhollow Way, and instead modify it as necessary to pertain to the new roadway proposed in the ATC.

TP 14.5.4 Bridge Structure No. 13 requires a bridge structure on Brookhollow Way to be constructed over Lentzler Creek at Station 6+66 Line "LS-5". WVB requests approval for elimination of this requirement of the RFP.

9 900000 (j) Analysis justifying use of the ATC and why the deviation, if any, from the requirements of the RFP should be allowed.

As discussed previously, the deviation from the requirements of the RFP would be to allow WVB to eliminate Brookhollow Way. By visual inspection of an aerial map of the subject area, the combination of the existing roadway network and alternative access roadway will result in the ATC functioning as well as, or better than, the preliminary design shown in RFP. The subject area is bounded by New Chapel Road to the north, Utica-Sellersburg Road to the west and south, and Salem Road to the east. The traffic generated from the castern part of the subdivision will have similar or better access to destination nodes within the region including much faster access to SR 265 and will help improve growth of River Ridge Development. Additionally, as noted below, the use of this ATC will now allow for future widening of the median on the mainline structures and will decrease widening costs and other impacts in the future. Lastly, the ATC will decrease the temporary and permanent impacts to the existing stream, floodplain and wetlands as well as decrease the construction and future impacts to the Brookhollow subdivision.

(k) Preliminary analysis of potential impacts on vehicular traffic (both during and after construction), community impact, safety, and life-cycle East End Crossing and infrastructure costs, including impacts on the cost of repair, maintenance and operation.

This ATC provides improved interstate and local roadway access. The alternative access roadway provides the residents of Boulder Creek Subdivision a more convenient and direct access to the new SR 265, via Patrol Road to the Salem Road interchange, than what is based on the preliminary design shown in the RFP. This alternative access roadway would also provide direct access to the new River Ridge Development area north of Patrol Road and help promote economic growth of the area.

This ATC provides improved safety and reduced impacts to the public during and after construction. The RFP requires that existing Brookhollow Way remain open to traffic during construction. Constructing an alternative access to Boulder Creek Subdivision prior to starting construction work on SR 265 will eliminate the need to maintain local traffic through a work zone. The result will greatly reduce the construction impact to motorists utilizing existing Brookhollow Way and improve safety for the traveling public and the construction workers. As a result of the alternative access, the time and frequency of local residents' exposure to traveling through a construction work zone will be lessened. This will improve the safety for the residents of the subdivision as well as other people traveling within the subdivision. Also, potential impacts to motorists within the subdivision in the future will be eliminated whenever INDOT adds the third trayel lane on SR 265 and widens the SR 265 Bridges over Lentzier Creek. The RFP preliminary design would require this future widening to be performed directly over the proposed Brookhollow Way Bridge and cause further impacts to the public during this reconstruction work. Currently, the future widening might also require a complex pier element (straddlebent or post-tensioned cap) to be constructed in order to avoid future impacts to Brookhollow Way. The RFP preliminary design of the Brookhollow Way Bridge also requires a very steep grade on the bridge and a proposed low point on the bridge which are both a safety condition for a local roadway. The ATC would remove those safety concerns to the motoring

public traveling Brookhollow Way on the steep and potentially key bridge during the winter months.

This ATC reduces impacts for maintenance and construction operations. As a result of the elimination of the realignment of Brookhollow Way under SR 265 and elimination of the associated bridge structure over Lentzier Creek, the SR 265 profile could be lowered to minimize the cost of the mainline bridges and approaching roadway embankment. The bridge removal and decrease in activities will allow for shorter construction duration within the subdivision area, Due to the removal of the Brookhollow Way Bridge, the overall maintenance of the local road would be reduced, and the maintenance concerns of the mainline SR 265 Bridge over Brookhollow Way would also be lessened due to the removal of the local roadway underneath. The overall decrease in construction and maintenance activities would lessen the construction traffic, material production, schedule and overall cost of the project and will greatly reduce impacts to the local residents and environment during construction and in the future. Additionally, the proposed development plans of the local community show a future connection between Boulder Creek Subdivision and Crystal Lake Subdivision with an additional tie-in to Patrol Road as shown with WVB's proposed alternate route. WVB will work with the subdivision developers and communities to build an alternate route that provides the best access for both the current and future residents of these subdivisions, and further propels the development of the area. WVB is committed to constructing the safest and most beneficial access route for Boulder Creek Subdivision that minimizes the total impacts to the residents now and in the future.

(l) Preliminary analysis of potential impacts on environmental permitting (including comparison to the NEPA Approvals and an analysis of whether the Proposer believes an updated or supplemental EIS would or would not be required and why).

The alternative access roadway is within areas previously investigated for the Environmental Impact Statement (EIS) including the Area of Potential Effect (APE) defined for Historical Resources. The work can then be accomplished by creating an Additional Information (AI) document to the EIS. The scope of work for the AI would include items consistent with preparation of a low level Categorical Exclusion (CE) document and would likely include additional wetland and waterway investigation, archaeology investigation, red flag investigation, and permit review. The AI can be completed in a significantly shorter period of time than a separate NEPA document (approximately two to three months for preparation). The alternative access roadway does not introduce any new impacts to streams, wetlands, or forested areas as evidenced by review of topographic maps, aerial photographs, and National Wetland Inventory Maps. It is located in a residential development area that was previously used for agricultural purposes, therefore we anticipate no major impacts to sensitive environmental resources. The 2.1 acres of additional right-of-way compared to the overall right-of-way impacted by the project is minimal and will not affect the AI. Due to the low likelihood of environmental impacts, we anticipate minimal agency review and approval time for the AI document.

Due to the elimination of the Brookhollow Way Bridge (three piers within the floodway), there will be less of an impact on Lentzier Creek and a reduction in overall impact to the local floodplain, wetlands, and stream. The work area will move from the environmentally sensitive

wetland/stream complex to an opland area. Additionally, with the removal of the Brookhoflow Way Bridge, the mainline SR 265 Bridge over Lentzier Creek could also be altered to further reduce impacts to the local environment and community. The ATC will also improve the ability of wildlife to cross this area by eliminating the bridge and vehicular traffic over the crossing. The reduction in roadway construction near the stream will reduce sediment and crosson control impacts during construction and reduce the potential for roadway pollutants to enter the stream in the post construction condition. Modifications to the IFA provided permits, including the Indiana Department of Natural Resources Construction in a Floodway Permit, Indiana Department of Environmental Management Section 401 Water Quality Certification, and US Army Corps Section 404 permit, would be required. However, since the modification would include a reduction in impacts, no substantive delays in obtaining these government approvals is anticipated.

Lastly, the ATC will also remove the temporary construction impacts from the temporary access route and temporary stream crossing that would be required to allow for constant access of Brookhollow Way. The ATC removes not only permanent impacts to the environment but also temporary impacts due to the temporary crossing and construction of the permanent bridge in the floodplain.

(m) Additional right-of-way required to implement the ATC.

WVB East End Partners will coordinate with the Crystal Springs Subdivision developer to limit the amount of right-of-way, if any, that would be required to be purchased. It is believed that no additional right-of-way would actually be required as the roadway will be constructed within existing plotted roadways and coordinate with the Subdivision Developer. However, if the Developer does not approve of the plotted roadway, the ATC would require approximately 2.1 acres of additional right-of-way.

(ii) Description of other projects where the ATC has been used, the degree of success or failure of such usage and names and contact information including phone numbers and e-mail addresses for project owner representatives that can confirm such statements.

Not applicable.

(a) Description of added risks to WA, the Department or third parties associated with implementing the ATC.

There are no added risks to the IFA, the Department or third parties with this ATC. The Brookhollow & Crystal Springs subdivisions are already planned to be connected by current plotted roads to be constructed in the future. WVB East End Partners is requesting to construct this connection now with utilizing the already plotted roadways to achieve unrestricted access to Brookhollow Subdivision and provide a better means of egress to SR 265 and the area as a whole while limiting the current risks of environmental impacts.

(p) Estimate of any additional IFA, the Department, Developer and third party costs associated with implementation of the ATC;

None

(q) Extinute of any suvings and additional toll or other revenue that would access to IFA and the Department should the ATC be approved and implemented.

As a result of the elimination of the realignment of Brookhollow Way under SR 265 and elimination of the associated bridge structure over Lentzier Creek, the SR 265 profile could be lowered to minimize the cost of the mainline bridges and approaching roadway embankment. The proposed alternative access to the Boulder Creek Subdivision will allow us to deliver the project at a lower cost to IFA due to reductions in construction and maintenance. Additionally, future bridge maintenance costs will be eliminated for both the Developer and ultimately IFA.

(r) Analysis of how the ATC is equal or botter in quality and performance than the regularments of the RFP.

As mentioned previously, by eliminating Brookhollow Way, the ATC will be equal or better in quality than the RFP requirements. In regards to the materials, the quality and performance will also meet the requirements of the RFP. The environmental footprint at the crossing will be reduced with less work in the sensitive area and will entirely remove the need for temporary impacts to the stream and floodplain limits. The traffic pattern for the neighborhoods will improve and construction impacts to the communities will be lessened. An added value in performance is by eliminating safety considerations for vehicles traveling through the construction zone and in permanent configuration of Brookhollow Way not driving up and down a steep roadway that is currently shown to have a low point on the bridge span underneath the mainline bridge structure.

(x) Preliminary unalysis of potential impacts on the MAP.

In conjunction with a reduction in the construction and maintenance costs, WVB's ATC #4 will significantly decrease project impacts to the surrounding local community and environment. Based on the revised RFP dated June 22<sup>nd</sup>, 2012, the reduction to the MAP is estimated to be a minimum \$70,000 discount. This MAP deduction equates to a Net Present Value reduction of over \$2.5 Million savings to IFA in addition to the aforementioned safety, environment and community benefits.



Indiana Finance Authority One North Capitol, Suite 900 Indianapolis, IN 46204

August 30, 2012

Sidney Florey, Project Executive WVB East End Partners 1260 East Summit Street Crown Point, Indiana 46307

RE: East End Crossing RFP, ATC WVB #5

Dear Mr. Florey:

The indiana Finance Authority ("IFA") has reviewed Alternative Technical Concept ("ATC") no. WVB #5 submitted on August 2, 2012 by WVB East End Partners in response to the Request for Proposals for the East End Crossing issued by the IFA on July 31, 2012 (as amended, the "RFP").

IFA's response to the referenced ATC is included in Attachment 1.

IFA appreciates your continued interest in the East End Crossing.

Sincerely.

Silvia Perez IFA Project Manager

Attachment

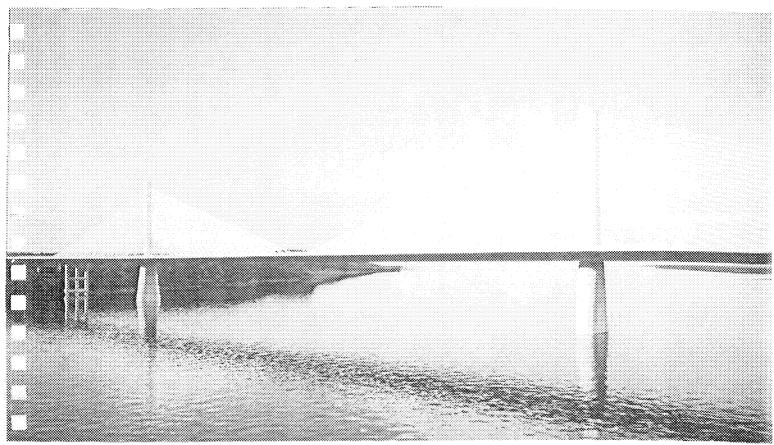
#### ATTACHMENT 1

#### WVB East End Partners

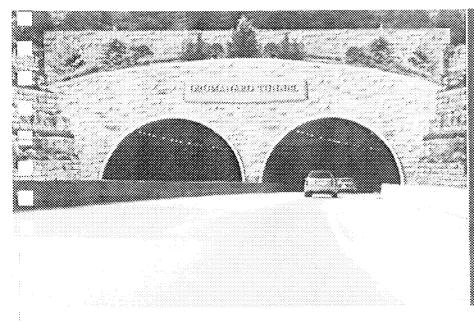
August 30, 2012

- ATC WVB #5 The ATC is acceptable for inclusion in the Proposal with the following conditions:
  - The Proposer shall demonstrate as part of Design Review and throughout the development of Design Documents that the global pillar stability has a minimum factor of safety of 1.4 for initial support of pillar and a minimum factor of safety of 2.0 for final support of pillar.
  - The Proposer shall be responsible and bear the schedule and monetary risk of any modifications to any Environmental Approvals required for or arising out of this ATC.
  - The Proposer shall be responsible and bear the schedule and monetary risk of any new or modified Governmental Approvals required for or arising out of this ATC.

If the Proposer wishes additional clarifications regarding an ATC submittal, the Proposer may provide a written request for clarification under <u>Section 2.3.1</u> of the ITP.



CONFIDENTIAL



Ohio River Bildges Project Metasitad Gossing Galfdeald ATCs

ATC-No.5

#### Submitted to:

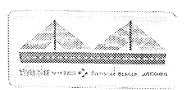
Indiana Finance Authority One North Capitol Avenue, Suite 900 Indianapolis, Indiana 46204 Altention: Sarah Rubin Telephone: 327, 234,7702

Fax: 317:232 6786 Email Address: rfa(@ifa.in.gov

## Submitted by:

WW East End Partners

WV8 East End Partners 1260 East Summit Street Crown Point, Indiana 46307 Phone: 315,207,3905



Basi End Crowsing

WVB East End Partners (WVB) submits the following ATC to IFA for review and approval per the requirements of the East End Crossing ITP.

### PART I: OVERALL DESCRIPTION OF THE ATC

(a) Sequential ATC another identifying the Proposer and the ATC number

#### WVB East End Partners

### ATC No. 5 Tunnel Shortening

(b) Description and conceptual drewings of the configuration of the ATC, including necessary design exceptions and a traffic operational analysis, if applicable.

#### Conceptual Drawing on Page 2

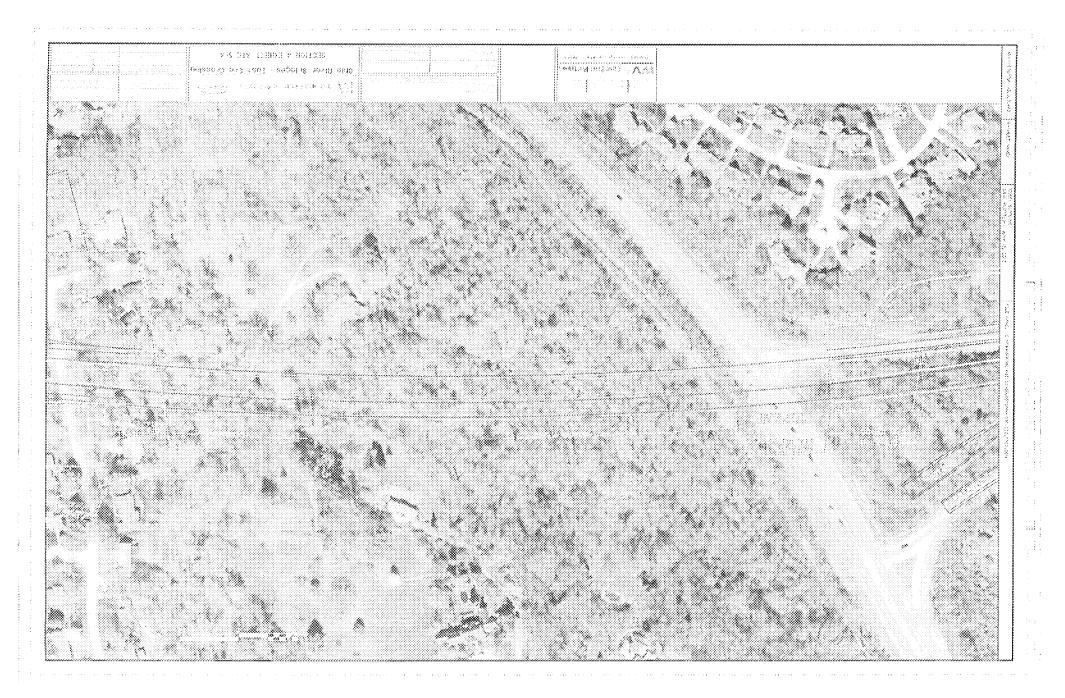
#### Exhibit ATC 5-A

As per the attached exhibit, WVB proposes the following

- Shift the south tunnel portals from Sta. 106+00.00 to 108+20.00. This shortens the south and of the tunnels by 220 feet.
- 2. Shift the north tunnel portals from Sta. 125+50.00 to 125+00.00. This shortens the north end of the tunnels by 50 feet.
- 3. Change the pillar width at the south portal from 40-foot to 35-foot and have the pillar width widen to 40-foot within the tunnel limits.

(c) ATC locations and Explanation of how the ATC will be used on the East End Crossing

As described above within item (b), the ATC locations are at the south and north tunnel portals. The ATC will be used to shorten the numers. Additionally, the 35-foot pillar will improve constructability adjacent to tight right-of-way east of the northbound south tunnel portal.



#### PART 2: DISCUSSION OF CHANGES FROM THE ATC

#### SUMMARY OF CHANGES FROM ATC

- 3	(d) Roadway Operations	(e) Capital Maintenance	(f) Handback Requirements	(g) Life of item	(h) Reduction in Completion Time	
	No	Yes.	No	No	Yes	

(d) Description of changes in rondway or operations requirements associated with the ATC, including case of operations.

No changes in roadway operations will result from the ATC. The shortened tunnel will improve emergency response operations by requiring escaping motorists and emergency responders to traverse less distance in emergency situations.

(e) Description of changes in routine or capital maintenance requirements associated with the ATC, including case of maintenance.

Shortening the tunnel by 270 feet will decrease the number and length of high cost items including Fire Life Safety systems, ventilation, lighting, and tunnel drainage, thus decreasing the maintenance cost to KYTC for the entire life of the tunnel structure.

(f) Description of changes in Handbuck Regulrements associated with the ATC

## Not applicable

(g) Description of changes in the anti-(pated life of the item(s) comprising or affected by the ATC.

No changes in anticipated life of the tunnels or tunnel approaches will result from the ATC.

th) Description of any reduction in the time period to reach Substantial Completion resulting from implementing the ATC, including, as appropriate, a description of method and commitments.

The tunnels are on the project critical path. Shortening the tunnels will reduce the time required to achieve substantial completion of the project and will allow for toll collection to begin earlier.

#### PART 3: ATC ANALYSIS AND JUSTIFICATION

- (i) References to requirements of the RFP which are inconsistent with the proposed ATC, an
  explaination of the nature of the deviations from said requirements, and a request for appearal of
  such deviations.
  - Tunnel shortening: Book 2, 9.3.1. #5 reads "KY 841 shall be built through a Tunnel that
    features a 40-foot constant pillar width between northbound and southbound roadways
    from Sta. 106+00.00 to Sta. 125+50.00." As described above within item (b), we are
    proposing to shorten the tunnel shifting the south portal from Sta. 106+00.00 to Sta.
    108+20.00 and the north portal from Sta. 125+50.00 to 125+00.00.
  - 2. Pillar width: Book 2, 9.3.1, #5 reads "KY 841 shall be built through a Tunnel that features a 40-foot constant pillar width between northbound and southbound roudways from Sta. 106+00.00 to Sta. 125+50.00." As described above within item (b), we are proposing to change the pillar width at the south portal from 40-foot to 35-foot.
- (i) Analysis fusiffying use of the ATC and why the deviation, if any, from the requirements of the RFP should be allowed.

Shortening the funnels does not result in any negative impacts to traffic operations either during or after construction. By shortening the tunnel, motorist and emergency responder safety is improved and project cost and schedule are reduced as noted above. The results from this ATC will provide IFA/KYTC benefits during construction and throughout the life of the tunnel structure.

(k) Preliminary analysis of potential impacts on vehicular traffic (both during and after construction), community impact, safety, and life-cycle East End Crossing and infrastructure costs, including impacts on the cost of repair, maintenance and operation.

The aforementioned revisions will not impact vehicular traffic either during or after construction.

As described above within item (e) "Shortoning the tunnel by 270 feet will decrease the number and length of high cost items, thus decreasing the maintenance cost to KYTC".

(1) Preliminary analysis of potential impacts on environmental permitting (including comparison to the NEPA Approvals and an analysis of whether the Proposer believes an apdated or supplemental EIS would or would not be required and why).

No impacts to environmental permitting will result from the ATC.

(m) Additional right-of-way respaired to implement the ATC.

No additional right-of-way will be required to implement the ATC.

(n) Description of other projects where the ATC has been used, the degree of success or fadiare of such usage and names and contact information including phone madbers and e-mail addresses for project owner representatives that can confirm such statements.

Not applicable.

(a) Description of added risks to IFA, the Department or third parties associated with implementing the ATC.

No added risks to the IFA, the Department, or third parties will result from implementing the ATC and, as noted above, a shortened tunnel will further reduce risks of accidents occurring within the tunnel limits.

(p) Estimate of any indittional IFA, the Department, Developer and third party costs associated with implementation of the ATC;.

No additional costs to the IFA, the Department, Developer, or third parties will result from implementing the ATC.

(q) Estimate of any savings and additional roll or other revenue that would accrue to IFA and the Department should the ATC be approved and implemented.

In additional to the significant construction costs savings, IFA/KYTC will realize substantial long-term O&M costs savings due to reduction in the quantity of high cost specialty items by nearly 15% with the shortened tunnel. Additionally, due to the shortened tunnel length, WVB East End Partners will be able to complete the tunnel construction faster and allow for an earlier opening of traffic and toll collection.

(r) Analysis of how the ATC is equal or better in quality and performance than the requirements of the RTP.

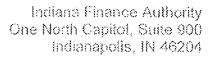
As the ATC simply shortens the tunnel and changes the south portal pillar width, it does not result in any changes to material quality or performance verses the requirements of the RFP. With that said, the shortened tunnel does provide enhanced performance in the most critical emergency scenarios. The shortened tunnel will require escaping motorists and emergency responders to traverse less distance in emergency situations.

(s) Preliminary analysis of potential impacts on the MAP.

WVB's ATC #5 will provide a substantial reduction in construction costs of the Drumanard Tunnel. Based on the revised RFP dated June 22<sup>nd</sup>, 2012, the reduction to the MAP is estimated to be a minimum \$1,100,000 discount. This MAP deduction equates to a Net Present Value reduction of nearly \$21 Million savings to IFA. This MAP reduction is in addition to the

significant maintenance savings that IFA / KYTC will realize throughout the lifetime of the tunnel.

The combined savings that can be realized to IFA with the approval of WVB's ATC # 5 and ATC # 7 is a Net Present Value of over \$27 William.





August 22, 2012

Sidney Florey, Project Executive WVB East End Pariners 1260 East Summit Street Crown Point, Indiana 46307

RE: East End Crossing RFP, ATCs WVB #6, 9, 11, 12 and 13

Dear Mr. Florey:

The Indiana Finance Authority ("IFA") has reviewed the Alternative Technical Concepts ("ATC") nos. WV8 #6, 9, 11, 12 and 13 submitted on August 2 and 17, 2012 by WVB East End Partners in response to the Request for Proposals for the East End Crossing issued by the IFA on July 31, 2012 (as amended, the "RFP").

IFA's responses to the referenced ATCs are included in Attachment 1.

IFA appreciates your continued interest in the East End Crossing.

Sincerely,

Jacob Blasdel

IFA Project Manager

Attachment

## ATTACHMENT 1

### WVB East End Partners

August 22, 2012

- ATC WV8 #6 The ATC is acceptable for inclusion in the Proposal with the following conditions
  - The Proposer shall be responsible for performing all necessary noise studies and providing any additional mitigation measures required to avoid creating additional noise impacts greater than those created by the Reference Design.
  - The Proposer shall demonstrate that their proposed design will provide an overall intersection level of service of C or better in the 2030 Design Year, and that all movements within the intersection will perform at level of service of D or better in the 2030 Design Year.
  - The Proposer shall demonstrate that queues at the proposed KY841/US42 intersection will not block the adjacent Bridgepointe Blvd. intersection.
  - The Proposer shall be responsible and bear the schedule and monetary risk of any modifications to any Environmental Approvals required for or arising out of this ATC.
  - The Proposer shall be responsible and bear the schedule and monetary risk of any new or modified Governmental Approvals required for or arising out of this ATC.
- 2. ATC WVB #9 The ATC is acceptable for inclusion in the Proposal with the following conditions
  - Weathering steel shall be coated at piers and abutments in accordance with the Indiana Design Manual Section 407.
  - The Proposer shall be responsible and bear the schedule and monetary risk of any modifications to any Environmental Approvals required for or arising out of this ATC.
  - The Proposer shall be responsible and bear the schedule and monetary risk of any new or modified Governmental Approvals required for or arising out of this ATC.
- 3. ATC WVB #11 The ATC is not acceptable for inclusion in the Proposal.
- 4. ATC WVB #12 The ATC appears to be within the requirements of the RFP and does not qualify as an ATC (<u>provided</u>, <u>however</u>, that should it turn out that the concept as incorporated into the Proposal is not within the requirements of the RFP, IFA reserves the right to require compliance with the requirements of the RFP and PPA Documents (without regard to the submittal), in which event the Proposer will not be entitled to modify its Proposal or obtain a Change Order for additional compensation or a time extension under the Agreement). Please see Addendum #1 TP <u>Section 19</u>.

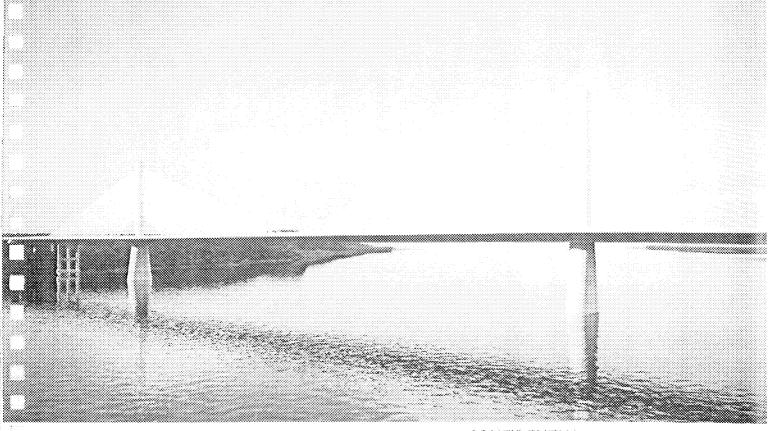
## ATTACHMENT 1

## WVB East End Partners

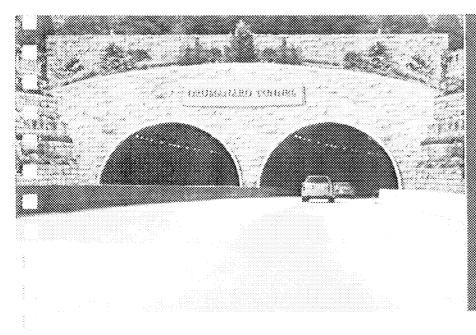
August 22, 2012

5. ATC WV8 #13 - The ATC appears to be within the requirements of the RFP and does not qualify as an ATC (<u>provided</u>, <u>however</u>, that should it turn out that the concept as incorporated into the Proposal is not within the requirements of the RFP, IFA reserves the right to require compliance with the requirements of the RFP and PPA Documents (without regard to the submittal), in which event the Proposer will not be entitled to modify its Proposal or obtain a Change Order for additional compensation or a time extension under the Agreement). Please see Addendum #1 TP Section 19.

If the Proposer wishes additional clarifications regarding an ATC submittal, the Proposer may provide a written request for clarification under <u>Section 2.3.1</u> of the ITP.



CONFIDENTIAL



# Olafo River Strologes Project His Sestend Grossing Confidental ATC

ATC-No.6

## Submitted to:

Indiana Finance Authority One North Capitol Avenue, Suite 900 Indianapolis, Indiana 46204 Attention: Sarah Rubin Telephone: 327.234.7700

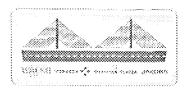
Fax: 217.232.6y86

Email Address: rfq@ifa.ia.gov

## Submitted by:

V// V = East End Partners

WVB East End Partners 1260 East Sümmit Street Crown Point, Indiana 46307 Plane: 315, 207, 3905



WVB East End Partners (WVB) submits the following ATC to IFA for review and approval per the requirements of the East End Crossing ITP.

#### PART I: OVERALL DESCRIPTION OF THE ATC

(a) Sequential ATC number identifying the Proposer and the ATC number

## WVB East End Partners

## ATC No. 6 Ramp A Modification

(b) Description and conceptual drawings of the configuration of the ATC, including necessary design exceptions and a traffic operational analysis, if applicable.

## Conceptual Drawing on Page 2

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As per the attached exhibit, we propose to eliminate the 840-foot flyover Ramp A, as proposed in the RID, and realign Ramp B to create a single point interchange at US 42. The new Ramp A will be aligned near the northbound right-of-way and cross-over the northbound south tunnel portal before tying into U.S. 42 with a new single point interchange. There will be no or limited reconstruction on U.S. 42 with this ATC, and available traffic movements will be allowed throughout construction and in the final configuration.

(c) ATC locations and Explanation of how the ATC will be used on the East End Crossing

The ATC location is at the south approach to US 42. The ATC will be used on the East End Crossing to reconfigure the interchange at KY 841 and US 42, providing a single point interchange and eliminating a costly fly-over bridge.



#### PART 2: DISCUSSION OF CHANGES FROM THE ATC

#### SUMMARY OF CHANGES FROM ATC

(d) Roadway	(e) Capital	(f) Handback	(g) Life of Item	(h) Reduction in
Operations	Maintenance	Requirements		Completion Time
Yes	Yes	No	No	Yes

(d) Description of changes in roadway or operations requirements associated with the ATC, including case of operations.

The single point intersection for the US 42 interchange was analyzed using Synchro to compare operations against the existing intersection as shown in the RFP. Using the 2030 turning movement volumes, the existing intersection will operate at a LOS D for both the AM and PM peak. With the single point intersection the LOS will be a C in the AM peak and a D in the PM peak. The single point intersection will provide all of the same lane configurations for the turning movements as the existing intersection, but with the addition of a second left turn lane from KY 841 to US 42. The single point intersection with the additional left turn lane will operate with less intersection delay and additional future capacity verses the existing intersection.

(e) Description of changes in routine or capital maintenance requirements associated with the ATC, including ease of maintenance.

Constructing a single point interchange will eliminate a flyover bridge from the DOT's maintenance program and reduce their overall costs.

(f) Description of changes in Handback Requirements associated with the ATC.

Not applicable

- Andrew

(g) Description of changes in the anticipated life of the item(s) comprising or affected by the ATC.

The ATC eliminates a long-span steel structure that has a shorter life-span than the proposed Ramp A alignment which will be built on rock and earthen subgrade and retaining walls as needed. Otherwise no changes in anticipated life of the affected items will result from the ATC.

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(h) Description of any reduction in the time period to reach Substantial Completion resulting from implementing the ATC, including, as appropriate, a description of method and commitments.

Constructing the new ramps as proposed will simplify maintenance of traffic during construction, as ramps will be constructed independently to existing ramps. This will improve motorist safety during construction as public traffic will be separated from construction traffic. Additionally, the single point can be opened in its final configuration sooner than the configuration shown in the RFP as it does not require the mainline construction to reach final grade and the ensuing bridge to be constructed prior to opening. Lastly, with the adjusted ramp configuration, it will allow for construction of the tunnel to be completed in a more effective manner, allow for faster completion of the excavation of the tunnel south portal, and may provide for an earlier Substantial Completion.

## PART 3: ATC ANALYSIS AND JUSTIFICATION

(i) References to requirements of the RFP which are inconsistent with the proposed ATC, an
explanation of the nature of the deviations from said requirements, and a request for approval of
such deviations.

Book 2, 9.3.2, #8 reads "A partial interchange at KY &41/U.S. 42 shall be constructed to allow access from northbound KY &41 to U.S. 42 and from U.S. 42 to southbound KY &41. The existing signalized intersection at KY841/U.S. 42 is not to be reconstructed." As described above within item (b), we are proposing to construct a single point interchange, which requires us to change US 42 traffic signal location and configuration.

(f) Analysis justifying use of the ATC and why the deviation, if any, from the requirements of the RFP should be allowed.

As described within items (d), (e), (h), and (k), revising the interchange configuration to a single point results in benefits to traffic operations, maintenance, constructability, project schedule, and driver expectation / motorist safety. This ATC allows for earlier completion, more efficient construction, increased value for money IFA and reduced maintenance costs for KYTC.

(k) Preliminary analysis of potential impacts on vehicular traffic (both during and after construction), community impact, safety, and life-cycle East End Crossing and infrastructure costs, including impacts on the cost of repair, maintenance and operation.

Constructing the new ramps as proposed will simplify maintenance of traffic during construction, as ramps will be constructed off-line relative to existing ramps. As a result, the single point interchange can be opened in its final configuration sooner than the configuration shown in the RFP as it does not require the mainline construction to reach final grade and the

ensuing bridge to be constructed prior to opening. These factors will lessen impacts to vehicular truffic during construction.

As described above within item (e) "Constructing a single point interchange will eliminate a flyover bridge from the DOT's maintenance program."

The configuration presented in the RFP documents consists of an on-ramp and off-ramp in very close proximity. This configuration can result in drivers who intend to enter southbound mainline, mistakenly going the wrong way into northbound lanes. Single point interchanges meet driver expectation very well, particularly in locations where the intersecting roadway is above mainline. Our proposed configuration provides safer operations both during construction and long-term. Operationally the single point configuration provides better controlled and free movements through increased capacity and improved signal timing.

(4) Preliminary analysis of potential impacts on environmental permitting (including comparison to the NEPA Approvals and an analysis of whether the Proposer believes an updated or supplemental EIS would or would not be required and why).

No impacts to environmental permitting will result from the ATC.

(m) Additional right-of-way required to implement the ATC.

No additional right-of-way will be required to implement the ATC.

(n) Description of other projects where the ATC has been used, the degree of success or failure of such usage and names and contact information including phone numbers and contail addresses for project owner representatives that can confirm such statements.

Not applicable.

(a) Description of added risks to IFA, the Department or third parties associated with implementing the ATC.

No added risks to the IFA, the Department, or third parties will result from implementing the ATC.

(p) Extinute of any additional IFA, the Department, Developer and third party costs associated with implementation of the ATC.

No additional costs to the IFA, the Department, Developer, or third parties will result from implementing the ATC.

(q) Estimate of any savings and additional toll or other revenue that would accrue to IFA and the Départment should the ATC be approved and implemented.

In addition to the reduce construction costs to IFA, the long-term maintenance costs to KYTC will also be reduced due to the removal of the 840-ft 3-span bridge structure.

(r) Analysis of how the ATC is equal or better in quality and performance than the requirements of the RFP.

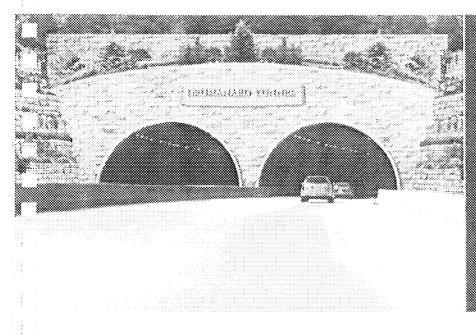
See items (d) and (k) for details on operational, maintenance, and safety benefits to implementing the ATC verses the requirements of the RFP.

(s) Preliminary analysis of potential impacts on the MAP.

WVB's ATC #6 will provide a reduction in construction costs of the KY 841 / US 42 Interchange. Based on the revised RFP dated June 22<sup>nd</sup>, 2012, the reduction to the MAP is estimated to be a minimum \$225,000 discount. This MAP reduction equates to a Net Present Value savings to IFA of nearly \$4.5 Million.



CONFIDENTIAL



Ohio River Bridges Project The East End Glossing

Cominicantial ATTO:

ATC-No.6 Additional Information

## Submitted to:

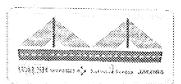
Indiana Finance Authority One North Capital Avenue, Suite goo Indianapolis, Indiana 48204 Attention: Jacob Blasdel Telephone: 317.234.2313 Fax: 317.232.6786

Email Address: rfg@ifa in gov

## Submitted by:

WV® East End Partners

WVB East End Partners 1260 East Semmit Street Crown Point, Indiana 4,6307 Phone: 315.207.3905



East End Crossing

WVB East End Partners (WVB) is in receipt of IFA's letter dated August 10, 2012 and submits the requested additional information for ATC No. 6.

Below and attached is the requested traffic report and capacity analysis.

The intersection of US 42 and KY 841 was malyzed using the current version of Synchro to compare operations between the proposed single point intersection and the existing intersection as shown in the RFP. The 2030 turning movement volumes were used from the Louisville Southern Indiana Ohio River Bridge Traffic Forecast report for the analysis.

Table I shows the level of service and intersection delay from the Synchro analysis. The existing intersection will operate at a Level of Service (LOS) D for both the AM and PM peak. The single point intersection will operate at a LOS C in the AM peak and a LOS D in the PM peak. The single point intersection will reduce the signal delay in the AM peak by over 20 seconds and in the PM peak by over 9 seconds. The single point intersection will provided all of the same turning movements and lane configurations as the existing intersection, but with the additional of a second left turn lane from northbound KY 841 to westbound US 42. The single point intersection with the additional left turn lane will operate with less intersection delay and additional future capacity versus the existing intersection.

Table 1: Level of Service and Intersection Delay

	2030	AM	2030 PM		
	Level of	Delay	Lovel of	Delay	
	Service	(sec)	Service	(scc)	
Existing Intersection	Đ	49.5	D	48.9	
Proposed Single Point	C	22.2	Ð	39,5	
Intersection				v.	

Usine Grotio <u>CBT_EBR_WBI_WBT_NBI_NBR_</u> Larse Configurations <b>有介 / 內內 內內 內</b> Volume (vph) 110 670 1430 670 320 460  Ideal Flow (vphpi) 1900 1900 1900 1900 1900	
Läne Configurations **	
Volume (vph) 110 670 1430 870 320 460	
Ideal Flow (vphpt) 1900 1900 1900 1900 1900	
Storage Length (ft) 200 475 0 228	
Storage Lanes 1 2 1 2	
Taper Length (II) 25 25	
Lane UIII, Factor 0.95 1.00 0.97 0.95 1.00 0.88	
Fr 9.850 9.850	
Fit Protected 0.950 0.959	
Sald, Flow (prof) 3539 1580 3433 3539 1770 2787	
Fit Permitted 0.966 0.950	
Sald, Flow (perm) 3539 1583 3433 3639 1770 2787	
Right Tura on Rad Yes Yes Yes	
Travel Time (s) 6.4 10.3 10.4	
Peak Hour Factor 0.92 0.92 0.92 0.92 0.92	
Adj. Flow (vpt.) 120 728 1554 946 348 522	
Shared Lane Traffic (%)	
Lane Group Flow (vph) 120 728 1554 946 348 522	
Enter Blocked Intersection No No No No No No	
Lane Alignment Left Right Left Left Right	
Median Width(II) 24 24 12	
Link Offset(ft) 0 0 0	
Crosswark Width(ft) 16 16	
Two way Left Tran Lane	
Headway Factor 1.00 1.00 1.00 1.00 1.00	
Turning Speed (mph) 9 15 15 9	
Turn Type NA Perm Prot NA NA Perm	
Protected Phases. 4 3 8 2	
Permitted Phases 4 2	
Detector Phase 4 4 3 8 2 2	
Switch Phase	
Minimum Initial (s) 4.9 4.0 4.0 4.0 4.0	
Minimum Spiil (s) 20.0 20.0 8.0 20.0 20.0 20.0	
Total Split (s) 35.9 35.0 56.0 91.0 29.0 29.0	
Total Split (%) 29.2% 29.2% 46.7% 75.8% 24.2% 24.2%	
Maximum Green (s) 31.0 31.0 52.0 87.0 25.0 26.0	
Yellow Time (s) 3.0 3.0 3.0 3.0 3.0	
All-Red Time (s) 1.0 1.0 1.0 1.0 1.0 1.0	
Lost Time Adjust (s) 9.0 0.0 0.0 0.0 0.0 0.0	
Total Lost Time (s) 4.0 4.0 4.0 4.0 4.0	
Lead/Lag tag tesd	
Lead-Lag Optimize? Yes Yes Yes	
Vehicle Extension (s) 3.0 3.0 3.0 3.0 3.0	
Recall Mode None None None C-Max C-Max	
Walk Time (s) 5.0 5.0 5.0 5.0 5.0	
Flash Dont Waik (s) 11.0 11.0 11.0 11.0	

	·····	7	4	digener	**	<i>p</i>	
Lane Group	183	SBR	WBI	wet	NBI.	NBR	
Pedestrian Calls (#/hr)	0	0	***************************************	9	0	Û	
Act Effct Green (s)	31.0	31.0	52.0	87.0	25.0	26.0	
Actuated g/C Ratio	0.26	0.28	0.43	8.72	0.21	0.21	
√⁄c Ratio	0.13	1.08	1.05	8.37	9.95	0.63	
Control Delay	34.7	80.0	89.8	6.7	82.4	5,4	
Queue Dalay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	34.7	80.0	69.8	6.7	82.4	5.4	
LOS	0	Ε	Æ	A	٤	A	
Approach Delay	73.8			45.9	36.2		
Approach LOS	E			1)	Ð		
Queue Length 50th (ft)	37	~409	~673	127	266	0	
Quaue Langth 95th (ft)	83	#648	#809	157	#451	48	
Internal Link Dist (ft)	344			598	378		
Turn Bay Length (ft)		200	475			225	
Base Capacity (vph)	914	675	1487	2565	368	993	
Starvation Cap Reductn	0	9	0	Ø	0	0	
Spillback Cap Reductn	0	0	0	Ø	0	ð	
Storage Cap Redustn	0	1)	0	0	0	Ð	
Reduced v/c Ratio	0.13	1.08	1.05	0.37	0.95	0.53	
23/2003/00/2019/2019/2019							

Intersection Summary

1

Area Type: Office

Gycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Retio: 1.08 intersection Signal Delay: 49.5

Intersection Signal Delay: 48.5 Intersection LOS: D Intersection Capacity Utilization 88.9% ICU Level of Service E

Analysis Period (n/m) 15

Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Splits and Phases: 5: 841 & US 42



	<u>.</u>	7	4		*	14	
lane Group	£81	ESH	WSL	W81	NBL	NBR	
Lane Configurations	神	7	N.	<b>**</b>	*	17	***************************************
Volume (vph)	1088	210	490	439	580	1120	
ideal Flow (vphpi)	1900	1900	1906	1900	1900	1900	
Storage Length (ti)	3,0000	200	475	3.40,454.5	0	225	
		3.500 \$	2		1	2	
Storage Laces		3	25		26	-51	
Taper Length (it)	0.300	4 500		2.00		0.00	
Lane Util, Factor	0.95	1.00	0.97	0,95	1.60	0.08	
Fit		0,850	a era		Arren	8.850	
Fii Protected		. 20.00	0.950		0.980	04177	
Sald. Flow (prot)	3539	1583	3433	3539	1770	2787	
Fill Permitted			0.950		6.959		
Setd, Flow (perm)	3539	1583	3433	3539	1770	2787	
Right Turn on Red		Yes				Yes	
Sald, Flow (RTOR)		176				621	
Link Speed (mph)	45			45	30		
Link Distance (ff)	424			678	458		
Travel Time (s)	6,4			10.3	10.4		
Peak Hour Factor	9.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	1174	228	533	487	739	1217	
Shared Lane Traffic (%)	- * * * *		4 4 4			1.4	
Lane Group Flow (keh)	1174	228	533	487	739	1217	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Leit	Leff	Right	
Median Widin(ft)	24	. 05.11	44.00	24	12	1.3155.10	
Link Offsei(ff)	0			0	0		
Crosswalk Width(ft)	16			16	16		
	500			213	:0		
Two way Left Turn Lane	2.000	3.00	2.00	x 200	4.00	X 2/2	
Headway Factor	1.00	1,00	1.00	1.00	1.00	1,00	
Turning Speed (mph)	X 2 5	9	15	4.68	15	9	
Tom Type	NA	Perm	Prot	NA	NA.	Perm	
Protected Phases	4		3	3	2		
Permitted Phases		4				ž.	
Detector Phase	4	4	3	8	2	2	
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Micienum Split (s)	50.0	20.9	8.0	20.0	20.0	20.6	
Total Split (s)	36.0	36.0	19,0	55.9	45.0	45.0	
Total Split (%)	36.9%	36.6%	19.0%	55.0%	45.0%	45.0%	
Maximum Green (s)	32.0	32.0	15.0	54.9	41.0	41.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.9	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	9.0	0.0	9,0	0.0	3,8	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
LeadLag	Lag	Lag	Lead				
Lead-Lag Optinize?	Yes	Yes	Yes				
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3,0	
Recall Mode	Mone	None	None	None	C-Max	C-Max	
Walk Time (s)	5.0	5.0	7.4476213	5.0	5.8	5.0	
	11.0	11.9			11.0		
Flash Dont Walk (s)	11.0	13.37	******************************	11.0	3 1.33	11.0	

		7	April 1	dime	4	p			
Lans Group	EBT	EBR	W8L	WBT	NSL	NBR			
Pedestrian Calls (#/hr)	0	8		0	0	()	 are canada a	 ***************************************	***************************************
Act Effet Green (s)	32.0	32.0	15.0	51.0	41.0	41.0			
Actuated g/C Ratio	0.32	0.32	0.15	0.51	0.41	0.41			
√ć Ratio	1.04	0.36	1.04	9.26	1.02	0.81			
Control Delay	71.1	8.8	92.1	14,3	69.8	17.1			
Queue Delay	0.0	0.0	0.0	0.0	9.0	9.0			
Total Delay	71.1	8.9	92.1	14.3	69.0	17.1			
LOS	E	A	¢	8	Ξ	В			
Approach Delay	61.0			55.8	36.7				
Approach LOS	E			Ε	Ð				
Queue Length 50th (ft)	~426	23	~189	84	~482	195			
Queue Length 95th (ft)	#557	80	#293	116	#725	301			
Internal Link Dist (ft)	344			598	378				
Turn Bay Length (ft)		200	475			225			
Base Capacity (vph)	1132	626	814	1804	725	1509			
Starvation Cap Reductn	0	9	Q	Ü	9	Ü			
Spillback Cap Reductin	Q	0	0	Ü	0	Ű			
Storage Cap Reductn	Q	0	0	0	0	Ū			
Reduced v/c Ratio	1.04	9.38	1.04	0.26	1.02	9,81			

Intersection Summary

Area Type:

-Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 6 (0%), Referenced to phase 2:NBL and 6;, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

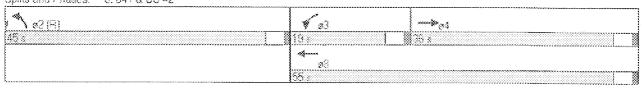
Maximum v/c Ratio: 1.04 Intersection Signal Delay: 48.9 Intersection Capacity Utilization 91.5%

Intersection LOS: 0
ICU Level of Service F

Analysis Period (min): 15

- Volume excueds capacity, queue is theoretically infinite.
   Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum effer two cycles.

Splits and Phases: 5:841 & US 42



	·····		<i>y</i>	·Quin	*	C.	*)	130	
Lane Group	EBT	EBR	WBL	W81	NW.	NWR	NEL	NER	
Larve Configurations	**		1/1/1	<b>个</b> 个	智育				
Volume (vph)	Íίδ	0	1430	870	326	0	Ó	9	
ideal Flow (vphol)	1900	1900	1900	1900	1900	1900	1900	1999	
Lane Util Factor	9,95	1.00	0.97	0.95	6.97	1,00	1.00	1,00	
Frt									
Fit Protected			0,950		0.950				
Satd. Flow (prot)	3539	9	3433	3539	3433	9	0	0	
Fit Permitted			6,950		0.950				
Sald. Flow (perm)	3539	8	3433	3539	0433	0	0	0	
Right Turn on Red						Yes			
Sald, Flow (RTOR)									
Link Speed (mph)	45			48	45		45		
Link Dislance (ft)	141			135	200		189		
Travel Time (s)	2.1			2.0	3.0		2.9		
Peak Hour Factor	0.82	0.92	0.92	0.92	9,92	9.82	9.92	0.92	
Adj. Flow (vph)	120	ő	1554	948	348	Q	ð	0	
Shared Lane Traffic (%)	7	~				~	Ť	25.	
Lane Group Flow (vph)	120	9	1554	946	348	0	0	0	
Enter Glocked Intersection	No	Nb	No	No	No	No	No	No	
Lane Alignment	Lett	Right	Left	Left	Left	Right	Left	Right	
Median Width(ft)	24	· viction	2370	24	24	2.00000	0	139.0	
Link Offset(it)	0			0	0		õ		
Crosswaik Widih(fi)	16			16	16		38		
Two way Left Turn Lane	1.75				•				
Headway Pactor	1.00	1.00	1,00	1.00	1.00	1,00	1.00	1,00	
Turning Speed (mph)		9	25		25	9	15	9	
Turn Type	NA	.,	Prof	NA	NA			-	
Protected Phases	4		3	8	2				
Permitted Phases	,				~				
Detector Phase	હૈ		3	8	2				
Switch Phase									
Minimum Initial (s)	4.6		4.0	4.0	4,0				
Minimum Split (s)	22.0		10.0	22.0	22.0				
Total Split (s)	22.9		46.0	68.0	22.0				
Total Split (%)	24.4%		51.1%	75.6%	24.4%				
Maximum Green (s)	16.0		40.0	62.0	16.0				
Yellow Time (s)	4.0		4.0	4.0	4.0				
All-Red Time (s)	2.0		2.8	2.0	2.0				
Lost Time Adjust (s)	0.0		0.0	9.0	0.0				
Total Lost Time (s)	6.0		6.0	6,0	6,0				
Lead/Lag	Lag		Lead						
Lead-Lag Oplimize?	Yes		Yes						
Vehicle Extension (s)	3.0		3.0	3.9	3,0				
Recall Mode	None		None	Mone	Max				
Walk Time (s)	5.0			5.0	5.0				
Flash Dont Walk (s)	11.0			11.0	11.0				
Pedestrian Calls (#/hr)	0			0	Ű				
Act Effot Green (s)	8.1		40.2	51.5	16.1				
Adjusted g/C Ratio	8.10		0.50	0,65	0.20				

	~~~}\$		<b>%</b>	**************************************	*	<b>C</b> *	*)	100			
Lana Group	681	EBR	WBL	Wet	NVVL.	NWR	NEL	NER			
vic Ratie	8.33		0,90	0.41	0.50			et etter etter etter etter etter etter etter etter etter etter etter etter etter etter etter etter etter etter	 ***************************************	o <del>nte</del> ntence de la con-	
Control Delay	38.8		27.9	7.3	32.2						
Queue Delay	0.0		0.0	0.0	0.0						
Total Delay	38.8		27.9	7.3	32.2						
LÖS	D		C	A	0						
Appreach Delay	35.8			20.1	32.2						
Appreach LOS	D			C	0						
Queue Length 50th (ft)	31		367	103	83						
Queue Length 95th (ft)	56		#556	137	128						
Internal Link Dist (ft)	61			55	120		109				
Turn Bay Length (ft)											
Base Capacity (vph)	714		1732	2831	693						
Starvation Cap Reductn	ĕ		Ö	0	0						
Spillback Cap Reductn	0		Ü	0	0						
Storage Cap Reductn	0		0	0	0						
Reduced v/c Ratio	0.17		0.90	0.33	0.50						

Intersection Summary

Area Type:

Other

Cycle Length: 90

Actuated Cycle Length: 79.7

Natural Cycle: 90

Control Type: Semi Act-Unocord Maximum v/c Ratio: 8,99 Intersection Signal Delay: 22.2 Intersection Capacity Utilization 86.6%

Intersection LOS; C ICU Level of Service C

Analysis Penod (min) 15

# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Splits and Phases: 3: US 42



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lane Group	E81	EBR	W8L	W81	NW	NWR -	NEL	NER			
Lane Configurations	<b>个个</b>		ኻኻ	<b>*</b>	ሻሻ	***************************************			•••••	***************************************	******************
Volume (vph)	1080	9	490	430	880	Ü	Ü	Ü			
ideal Flow (vphpt)	1900	1900	1900	1900	1900	1900	1900	1900			
Lane Util. Factor	0.95	1.00	0,97	0.95	9.97	1.00	1.00	1.00			
Frt	9,00	1 18112				* 15.5		* 2. * . *			
Fit Protected			0.950		0.950						
Said. Flow (prof)	3539	Ŏ	3433	3539	3433	0	8	0			
Fit Permitted	2000	V	0.950	The subtract was	0.950	2/	v				
Satd. Flow (perm)	3539	0	3433	3539	3433	0	8	0			
Right Turn on Red	4000	· ·	U700	1900.00	5700	Yes	4.7	•			
Satd. Flow (RTCR)						100					
	45			45	45		45				
Link Speed (mph)	141			135	200		189				
Link Distance (fl)							2.9				
Travel Time (s)	2.1	0.00	2.00	2.0	3.0	8.20		8.00			
Peak Hour Factor	0.92	0,92	0.92	0.92	0.92	0.92	0.92	0.92			
Adj. Flow (vph)	1174	9	533	467	739	0	0	Q			
Shared Lane Traffic (%)	ie.				nao	*					
Lane Group Flow (vph)	1174	. 9	533	467	739	. 0	. 0	. 9			
Enter Blocked Intersection	No	No	No	No	No	No	No	No			
Lane Alignment	Left	Right	Left	Left	Left	Right	Left	Right			
Median Width(it)	24			24	24		0				
Link Offset(fi)	0			0	0		9				
Crosswalk Width(ft)	16			16	16		16				
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)		9	25		25	9	15	9			
Tura Type	ŃΑ		Prot	NA	NA						
Protected Phases	4		3	ĝ	2						
Permitted Phases											
Detector Phase	4		3	ä	2						
Switch Phase											
Minimum Initial (5)	4.0		4.0	4.0	4.0						
Minimum Split (s)	22.0		10.0	22.6	22.0						
Total Split (s)	34,0		19.0	53.0	27.0						
Total Split (%)	42.5%		23.8%	66.3%	33,8%						
Maximum Green (s)	28.0		13.0	47.0	21.0						
Yellow Time (s)	4.6		4.0	4.0	4.0						
All-Red Time (s)	2.6		2.0	2.0	2,0						
Lost Time Adjust (s)	0.0		0.0	0.0	0.0						
Total Lost Time (s)	6.0		6.0	6.0	6.0						
Lead/Lag	Lag		Lead								
Lead-Lag Optimize?	Yes		Yes								
Vehicle Extension (s)	3.8		3,0	3.9	3.0						
Recall Mode	None		None	None	Max						
Walk Time (s)	5.0			5.0	5.0						
Flash Dont Walk (s)	11.0			11.0	11.0						
Pedestrian Cells (#hr)	9			0	Ü						
Act Effet Green (s)	28.0		13.0	47.0	21.0						
Actuated g/C Ratio	0.35		9.46	9.59	0.26						

	·····	JI	У	.sq	A STATE	Car	*)	/*v	
Lane Group	EBT	EBR	WOL	W81	NW.	NWR	MEL	NER	
vic Ratio	6.95		9.96	0.22	0.82				
Control Delay	42.5		84.1	8.2	36.8				
Ousue Délay	0.0		0.0	0.0	0.0				
Total Delay	42.5		64.1	8.2	36.8				
LOS	Ð		£	Α	<b>(</b> )				
Approach Delay	42.5			38.0	36.8				
Approach LOS	D			Ð	Ð				
Queue Length 50th (ft)	295		137	53	178				
Queue Length 95th (ft)	#432		#234	76	#263				
Internal Link Dist (ft)	61			55	420		109		
Turn Bay Length (fl)									
Base Capacity (voh)	1238		557	2079	901				
Starvation Cap Reducts	0		9	9	Ü				
Spillback Cap Reducto	0		0	ð	0				
Storage Cap Reductin	0		0	-0	0				
Reduced v/c Ratio	0.95		0.98	0.22	0.82				
Intersection Summary									

Area Type:

Öther

Cycle Length: 80

Actuated Cycle Length: 80

Matural Cycle: 80

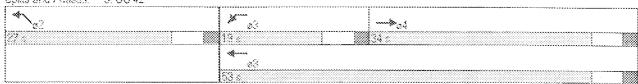
Control Type: Semi Adl-Uncoord Maximum v/c Ratic: 0.96 Intersection Signal Delay: 39.5 Intersection Capacity Utilization 78.2%

Intersection LOS: D 10U Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Spais and Phases: 3: US 42





Indiana Finance Authority One North Capitol, Suite 900 Indianapolis, IN 46204

August 22, 2012

Sidney Florey, Project Executive WV8 East End Partners 1260 East Summit Street Crown Point, Indiana 46307

RE: East End Crossing RFP, ATCs WVB #6, 9, 11, 12 and 13

Dear Mr. Florey:

The Indiana Finance Authority ("IFA") has reviewed the Alternative Technical Concepts ("ATC") nos. WVB #6, 9, 11, 12 and 13 submitted on August 2 and 17, 2012 by WVB East End Partners in response to the Request for Proposals for the East End Crossing issued by the IFA on July 31, 2012 (as amended, the "RFP").

IFA's responses to the referenced ATCs are included in Attachment 1.

IFA appreciates your continued interest in the East End Crossing.

Sincerely,

Jacob Blasch

Jacob Blasdel

IFA Project Manager

Altachment

## ATTACHMENT 1

#### WVB East End Partners

August 22, 2012

- 1. ATC WVB #6 The ATC is acceptable for inclusion in the Proposal with the following conditions
  - The Proposer shall be responsible for performing all necessary noise studies and providing any additional mitigation measures required to avoid creating additional noise impacts greater than those created by the Reference Design.
  - The Proposer shall demonstrate that their proposed design will provide an
    overall intersection level of service of C or better in the 2030 Design Year,
    and that all movements within the intersection will perform at level of
    service of D or better in the 2030 Design Year.
  - The Proposer shall demonstrate that queues at the proposed KY841/US42 intersection will not block the adjacent Bridgepointe Blvd, intersection.
  - The Proposer shall be responsible and bear the schedule and monetary risk of any modifications to any Environmental Approvals required for or arising out of this ATC.
  - The Proposer shall be responsible and bear the schedule and monetary risk of any new or modified Governmental Approvals required for or arising out of this ATC.
- 2. ATC WVB #9 The ATC is acceptable for inclusion in the Proposal with the following conditions
  - Weathering steel shall be coated at piers and abutments in accordance with the Indiana Design Manual Section 407.
  - The Proposer shall be responsible and bear the schedule and monetary risk of any modifications to any Environmental Approvals required for or arising out of this ATC.
  - The Proposer shall be responsible and bear the schedule and monetary risk of any new or modified Governmental Approvals required for or arising out of this ATC.
- 3. ATC WVB #11 The ATC is not acceptable for inclusion in the Proposal.
- 4. ATC WVB #12 The ATC appears to be within the requirements of the RFP and does not qualify as an ATC (<u>provided</u>, <u>however</u>, that should it turn out that the concept as incorporated into the Proposal is not within the requirements of the RFP, IFA reserves the right to require compliance with the requirements of the RFP and PPA Documents (without regard to the submittal), in which event the Proposer will not be entitled to modify its Proposal or obtain a Change Order for additional compensation or a time extension under the Agreement). Please see Addendum #1 TP Section 19.

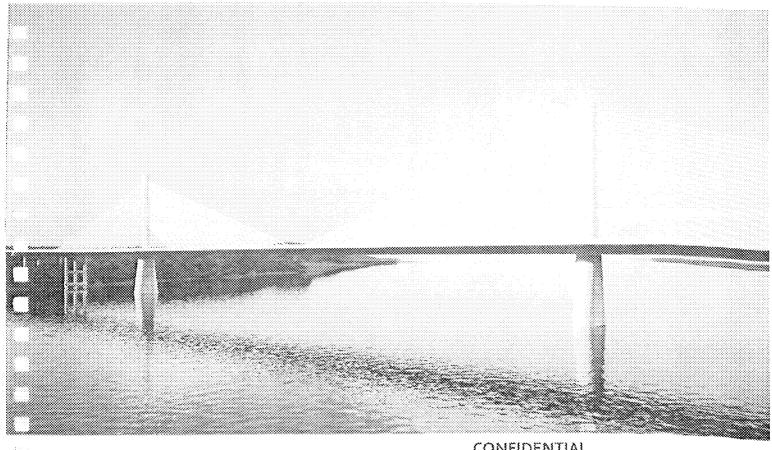
## ATTACHMENT 1

## WVB East End Partners

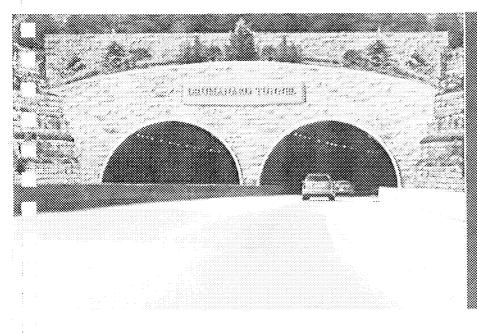
August 22, 2012

5. ATC WVB #13 - The ATC appears to be within the requirements of the RFP and does not qualify as an ATC (<u>provided</u>, <u>however</u>, that should it turn out that the concept as incorporated into the Proposal is not within the requirements of the RFP. IFA reserves the right to require compliance with the requirements of the RFP and PPA Documents (without regard to the submittal), in which event the Proposer will not be entitled to modify its Proposal or obtain a Change Order for additional compensation or a time extension under the Agreement). Please see Addendum #1 TP Section 19.

If the Proposer wishes additional clarifications regarding an ATC submittal, the Proposer may provide a written request for clarification under <u>Section 2.3.1</u> of the ITP.



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ATC-No.9

## Submitted to:

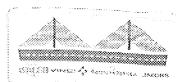
Indiana Finance Authority One North Capitol Avenue, Suite 900 Indianapolis, Indiana 48264 Attention: Jacob Blasdel Telephone: 317-234, 2123 Fax: 317.232.6786.

Email Address: rfq@ifa.in.gov

## Submitted by: VVV S East End Partners

WVB East End Partners 3260 East Semmet Street Cown Point, Indiana 46307

Phose: 315.207.3905



WVB East End Partners (WVB) submits the following ATC to IFA for review and approval per the requirements of the East End Crossing ITP.

## PART I: OVERALL DESCRIPTION OF THE ATC

(a) Sequential ATC morber identifying the Proposer and the ATC number

#### WVB East End Partners

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## ATC No. 9 East End Bridge Uncoated (Unpainted) Weathering Steel

(b) Description and concepted drawings of the configuration of the ATC, including necessary design exceptions and a traffic operational analysis, if applicable

WVB East End Partners will provide uncoated (unpainted) weathering steel (ASTM A709 Grades 50W, 70W and HPS) for the structural steel elements supporting the superstructure of the East End Bridge which is comprised of the Main Spans (Sta. 187+40 to Sta. 212+50) and the Kentucky Approach Spans (Sta. 167+85.86 to Sta. 187+51.86). The use of uncoated weathering steel provides for a cost-effective bridge design with low maintenance and significantly lower life-cycle costs as compared to painted structural steel prescribed in Technical Provisions Section 15.5.1.

(v) ATC locations and Explanation of how the ATC will be used on the East End Crossing

Uncoated weathering steel ASTM A709 with Grades 50W, 70W and HPS (high performance steel) will be provided in all the structural steel elements supporting the deck of the steel composite cable-stayed Main Spans, i.e. longitudinal edge girders, transverse floorbeams, stringers, etc., and the steel plate girders and diaphragms supporting the deck of the Kennucky Approach Spans.

## PART 2: DISCUSSION OF CHANGES FROM THE ATC

#### SUMMARY OF CHANGES FROM ATC

(d) Roadway	(e) Capital	(f) Handback	(g) Life of Item	(h) Reduction in
Operations	Maintenance	Requirements		Completion Time
No	Yes	No	Yes	No

(d) Description of changes in roadway or operations regultements associated with the ATC, including case of operations. The use of unconted weathering steel will have no effect in roadway requirements. It will have a positive effect on operations requirements as it will minimize and/or eliminate the need to close any lanes on the bridge that are typically associated with superstructure repainting contracts.

-te) Description of changes in routhue or capital maintenance requirements dissociated with the ATC, including case of maintenance.

The use of uncoated weathering steel will reduce both routine and capital (periodic) maintenance activities typically associated with painted structural steel structures. Koutine maintenance activities such as paint touch-up and clean-up, and periodic activities such as repainting of structural steel required every 15 to 20 years intervals; will be reduced and/or eliminated as uncoated weathering steel provides enhanced atmospheric corrosion resistance.

Uncoated weathering steel also offers environmental benefits compared to painted steel as the reduction in initial painting reduces adverse effects associated with emissions of volatile organic compounds (VOC) when oil based coatings are used. In addition, eliminating the removal of the coating and disposal of contaminated blast cleaning debris during periodic structure repainting work over the life span of the bridge, is another significant environmental benefit. For river crossings, the cost of collection and disposal of materials from a structure repainting project is significant.

(f) Description of changes in Handback Requirements associated with the AFC

The ATC will not modify or affect any of the Handback Requirements,

(g) Description of changes in the anticipated life of the item(s) comprising or affected by the ATC.

No changes are anticipated for the life of the East End Bridge however, this ATC does prolong the life of the structural steel members with removal of the otherwise required maintenance repainting work.

the Description of any reduction in the fine period to reach Substantial Completion resulting from implementing the ATC, including, as appropriate, a description of method and commitments

No reduction in the time period to reach Substantial Completion is anticipated from implementing the ATC.

#### PART 3: ATC ANALYSIS AND JUSTIFICATION

(i) References to requirements of the RFP which are inconsistent with the proposed ATC, an explanation of the nature of the deviations from said requirements, and a request for approval of such deviations.



Technical Provisions Section 15.5.1 Design for Durability states: "All structural steel shall be painted, with the exception of piles and maintenance appartenances, which shall be hot-dip galvanized, per ASTM A123".

This ATC requests approval to use uncoated weathering structural steel painted with a three coat system. WVB East End Partners will utilize uncoated weathering steel and implement the following design details:

- 1) Paint weathering steel in those areas of the bridge deck that are vulnerable to exidation and corrosion, and specifically at deck expansion joints that are provided at the beginning of the Kennicky Approach Spans at Sta. Sta. 167+85.86, at common Pier 1 between the Kennicky Approach Spans and the Cable-Stayed Main Spans at Sta. 187+40, at transition Pier 2 at Sta. 188+55, at transition Pier 5 at Sta. 211+35, and at the Indiana abutment at Sta. 212+50. Paint weathering steel with a three coat system in all structural steel elements of the cable-stayed Main Spans located within a distance of three times the depth of the girder from the expansion joints, i.e. paint longitudinal edge girders, floorbeams and stringers. Paint weathering steel with a three coat system in all structural steel elements of the Kentucky Approach Spans and the 115' long Kentucky and Indiana transition spans adjacent to the cable stayed Main Spans located within a distance of 1.5 times the depth of the girder from the expansion joints, i.e. steel girders and diaphragms.
- For the cable-stayed Main Spans, paint the stay-cable anchorages above the deck at the deck anchorage areas. Also add silicone caulk at the contact surfaces between the cable anchorage gusset plate and deck slab.
- 3) Apply epoxy resin seal on the surfaces of the cast-in-place pours placed atop the longitudinal edge girders supporting the deck of the cable-stayed Main Spans. Also apply epoxy or other feasible protective coating material at the inside faces of the tower legs in close contact to the bridge deck.
- 4) Provide drip grooves along the underside of the deck edge at both the cable-stayed Main Spans and the Kentucky Approach Spans
- 5) In order to mitigate against any unsightly stains on concrete surfaces, apply epoxy or other feasible protective conting material to cost and/or seal the top and side surfaces of the pier caps at all expansion joint piers.

The above design details and use of uncoated weathering steel will be addressed in detail in our Corrosion Protection Plan and submitted for review with the Stage 1 Design Documents as prescribed in Technical Provisions Section 15.5.1. A steel corrosion consultant will be utilized to develop a report addressing the use of weathering at the bridge site.

(i) Analysis justifying use of the ATC and why the deviation, if any, from the requirements of the RFP should be allowed.

Uncoased weathering grade steels have been used successfully in many river crossings, as noted in section (a), with demonstrated short and long-term savings. The higher initial cost of weathering steel is offset by the climination of the need for initial painting of the structure. Over

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the long term, cost savings would be materialized for not having to remove and repaint the structure every 15 to 20 years as required for painted structural steel.

Additionally, the use of weathering sized would be a more context-sensitive solution for the East End Bridge to allow it to blend into the local landscape and surroundings. The use of weathering steel in the bridge design would use this natural landscape color to help break up the visual concrete mass of the bridge and make it feel less imposing when viewed from a distance. Weathering steel is called out to be used throughout the East End Crossing and is specifically noted in aesthetic reference documents as it blends with the naturally rust staining limestone. The reference documents included a bridge type selection process which stated that the color of the bridge and all its components should blend in with the sky and the landscape and that local historic landscape should be considered inspiration for architectural themes in term of color. Based on this, WVB has taken aspects from the local limestone bluffs and quarries on both the Indiana and Kentucky landscape into consideration. The local limestone has an iron oxide which naturally rusts the exposed limestone. This lends to utilizing weathering steel for the East End Bridge to allow for a constant theme throughout the entire blast End Crossing corridor and will truly allow for the bridge and entire corridor, to blend together and into the natural landscape as requested by the bridge type selection process.

(8) Preliminary analysis of potential impacts on vehicular traffic (both during and after construction), community impact, safety, and life-cycle East End Crossing and infrastructure costs, including impacts on the cost of repair, maintenance and operation.

No adverse operation or safety impacts are anticipated from the use of weathering steel. On the contrary, the use of weathering steel will reduce any impacts to vehicular traffic as it will minimize and/or eliminate the need to close any traffic lanes on the bridge that are typically associated with superstructure repainting contracts. Maintenance costs will be significantly lower, as weathering steel does not need to be repainted as frequently as regular steel painted with a three coat system.

(1) Preliminary unalysis of potential impacts on environmental permitting (including comparison to the NEPA Approvals and an analysis of whether the Proposer believes an updated or supplemental EIS would or would not be required and why).

No modifications to environmental permitting would be required.

As discussed previously under item e) uncoated weathering steel will offer environmental benefits as compared to painted structural steel.

(m) Additional right-of-way required to implement the ATC.

No additional right-of-way will be required to implement the ATC.

m) Description of other projects where the ATC has been used, the degree of success or faiture of such usage and staines and contact information including phone numbers and e-mail addresses for project owner representatives that can confirm such statements

Uncoated weathering grade steels have been used successfully in several steel plate girder and cable-stayed bridge projects, among them the following:

#### The Bill Emerson Memorial Bridge - Cape Girardeau, Missouri

Contact Info of Project Owner Representatives:

Eric Krapf, Project Manager (MoDOT)

Phone: 573-472-5261

Entail: eric.krapf@modot.gov

## The Golden Ears Bridge - Vancouver, BC

Contact Info of Project Owner Representatives: Fred Commings, General Manager (TransLink)

Phone: 604-453-4598

Email: fre@translink.bc.ca

#### The Pitt River Bridge - British Columbia, Canada

Contact Info of Project Owner Représentatives:

Ron Lowther, Project Engineer (British Columbia Ministry of Transportation)

Phone: 604-354-6479

#### 1-70 & 1-465 to Sam Jones Expressway - Indianapolis, Indiana

Contact Info of Project Owner Representatives:

Elsadig Ibrahim, Project Engineer (Indiana Department of Transportation)

Phone: 317-714-9053

Email: eibrahim@indot.in.gov

#### 1-465 / 1-74 Interchange Modification - Indianapolis, Indiana

Confact Info of Project Owner Representatives:

Ling Can, Project Engineer (Indiana Department of Transportation)

Phone: 317-491-4268 Email: Igan@indot.in.gov

(a) Description of added risks to IFA, the Department or third parties associated with implementing the ATC.

There are no added risks in implementing the ATC. A corrosion study will be undertaken in final design to confirm use of weathering steel at the bridge site.

got Estimate of etty additional IEA, the Department, Developer and third party costs associated with implementation of the EUC;

No additional costs are associated with the proposed ATC as the higher initial cost of weathering steel is offset by the elimination of the need for initial painting of the structure.

(q) Extinute of any savings and additional roll or other revenue that would accene to IFA and the Department Should the ATC be approved and implemented.

The use of uncoated weathering steel will provide an abundant savings in life-cycle cost over the 100-year service life of the bridge. Based on the provision requirement of repainting the structure every 20 years, IFA / KYTC will realize savings of the four complete structure repainting operations which will no longer be required.

(ir) Analysis of how the ATC is equal or belief in quality and performance than the requirements of the RFT.

Uncoated weathering steel has enhanced atmospheric corrosion resistance and will provide equal or better durability as painted structural steel. Its durability/performance would be validated in our Corrosion Protection Plan. The increased life of the structural steel without maintenance (repainting) improves the performance of the bridge and reduces the impacts to the environment.

In addition, the use of weathering steel would enhance the aesthetic appearance of the East End Bridge as the weathering steel would nicely mimic the weathering seen in the ubiquitous fimestone walls and outcrops of the area. Further, the use of weathering steel is aligned with the RFP aesthetic requirements for a natural and minimal aesthetic focus of the bridge design, less artificial additions (paint and other paint prep materials) to the local environment. The weathering steel is also a natural phenomenon whereas the steel naturally reacts with its environment to protect itself, akin to the actions of the plants and rest of the natural context around it.

(s) Preliminary analysis of potential impacts on the MAP.

WVB's ATC #9 will provide a reduction in construction costs of the East End Main Span Bridge as well as provide a reduction in the Developer's maintenance cost during the O&M period. Based on the revised RFP dated June 22<sup>nd</sup>, 2012, the reduction to the MAP is estimated to be a minimum \$738,000 discount of the MAP. This MAP deduction equates to a Net Present Value reduction over \$14 Million savings to IFA. This MAP reduction is in addition to the continued maintenance savings that IFA / KYTC will realize in reduced maintenance costs throughout the lifetime of the structure.

November 5,2012

## VIA E-MAIL and UPS OVERNIGHT

Indiana Finance Authority
One North Capital Avenue, Suite 900
Indianapolis, Indiana 46204
Attention: Silvia Perez
Telephone: 317-234-7701

Fax: 317-232-6786

Email: SPerez/Aifa/IN.gov

Subject: EAST END CROSSING PROPOSAL - Technical Proposal Clarifications

Dear Ms. Perez:

WVB East End Partners is in receipt of BA's October 31st letter requesting clarifications to the Technical portion of our Proposal, which was submitted on October 26, 2012.

Attached is the clarifying and additional documentation as requested. This information is being famished electronically to your e-mail address before noon (prevailing Eastern Time) on November 5, 2012, and the required hard copies will be delivered directly to your office by hand or overnight courier the following day.

As always, please contact me immediately if there are any further questions or clarifications from the IFA regarding our Proposal.

Sincerely,

Sidney Florey

Duly Authorized Official WVB East End Partners 1260 East Sununit Street Crown Point IN 46307 407-470-6639 or 315-207-3908 sidney.florey@vinci.com Programme of Expensive Suppliers series that A Court is seen in charge in the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court of the court

To clarify WVB East End Partners' (WVB) Executive Summary, we included in the proposal only items from ATC #14 that IFA considered within the requirements, and did not include any item deemed by IFA to be unacceptable, as described in further detail below:

REALEST 1 - THERES, RESERVEST WESTER WVB has not included this item of the submitted ATC in our Proposal. The roadway width within the Tunnel matches the requirements in the Technical Provision.

has included in our Proposal the noted inside walkway width as proposed in WVB's ATC #14 which falls within the Technical Provision requirements.

Regarding the second sub-bullet for the outside walkway, WVB has not included the noted outside walkway width as proposed in WVB's ATC #14. The walkway width included in the Proposal falls within the requirements of the Technical Provisions.

the submitted ATC in our proposal. WVB's proposed carbon monoxide monitoring system meets the requirements of the Technical Provisions.

EMELET 5—EDGED FIRE SUPPRESSION SYSTEM: WVB has included this item of the submitted ATC in our Proposal which falls within the requirements of the Technical Provisions.

BULLET 5 - FURNISH DECEMBER WVB has included this item of the submitted ATC in our Proposal which falls within the requirements of the Technical Provisions.



Indiana Finance Authority One North Capitol, Suite 900 Indianapolis, IN 46204

August 30, 2012

Sidney Florey, Project Executive WVB East End Partners 1260 East Summit Street Crown Point, Indiana 46307

RE: East End Crossing RFP, ATC WVB #14

Dear Mr. Florey:

The Indiana Finance Authority ("IFA") has reviewed Alternative Technical Concept ("ATC") no. WVB #14 submitted on August 17, 2012 by WVB East End Partners in response to the Request for Proposals for the East End Crossing issued by the IFA on July 31, 2012 (as amended, the "RFP").

IFA's response to the referenced ATC is included in Attachment 1.

IFA appreciates your continued interest in the East End Crossing.

Sincerely,

Śilvia Perez IFA Project Manager

Attachment

# ATTACHMENT 1

### WV8 East End Partners

August 30, 2012

- ATC WVB #14 This ATC has several elements and each element has been considered separately. IFA's decisions with respect to the deviations requested in this ATC are as follows:
  - The deviation requested with respect to the <u>Tunnel Roadway Width</u> with reduced shoulders through the tunnel does not qualify as an ATC and may not be included in the Proposer's Proposal. The roadway width requirements as described in the Technical Provisions shall apply.
  - · With respect to the Tunnel Walkways:
    - The deviation requested with respect to the inside or left hand walkway (viewed in the direction of traffic) appears to be within the requirements of the RFP and does not qualify as an ATC (provided, however, that should it turn out that the concept as incorporated into the Proposal is not within the requirements of the RFP, IFA reserves the right to require compliance with the requirements of the RFP and PPA Documents (without regard to the submittal), in which event the Proposer will not be entitled to modify its Proposal or obtain a Change Order for additional compensation or a time extension under the Agreement). The inside walkway shall be 2'-6" minimum width as required by the Technical Provisions.
    - In accordance with <u>Section 3.2.4</u> of the Instructions to Proposers ("ITP"), IFA has determined that the RFP contains an error, ambiguity or mistake with respect to the outside or right hand walkways (viewed in the direction of traffic) and intends to correct the error, ambiguity or mistake, regardless of the impact on the proposed ATC (including that such ATC no longer qualifies or is eligible for consideration as an ATC). After reviewing the modifications to the RFP, if the Proposer believes that this element of the submittal qualifies as an ATC and wants IFA to consider the submittal, it should resubmit the same for consideration.
  - The deviation requested with respect to the <u>Cross Passage Spacing</u> is not acceptable for inclusion in the Proposal. The requirements of the Technical Provisions and the applicable NFPA 502 standard shall apply.
  - The deviation with respect to the <u>Carbon Monoxide Monitoring System</u> is not acceptable for inclusion in the Proposal. The intent is to monitor CO levels in the tunnel itself rather than in the cross passages.
  - The deviation with respect to <u>Fixed Fire Suppression System</u> appears to be within the requirements of the RFP and does not qualify as an ATC (<u>provided</u>, <u>however</u>, that should it turn out that the concept as incorporated into the Proposal is not within the requirements of the RFP, JFA reserves the right to require compliance with the requirements of the RFP and PPA

# ATTACHMENT 1

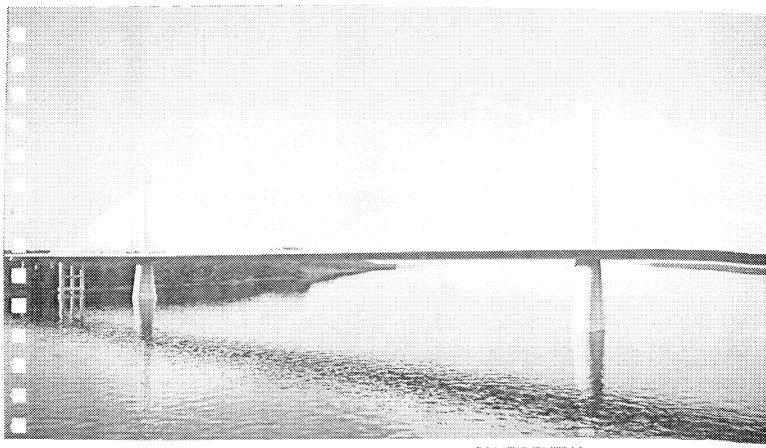
### WVB East End Partners

August 30, 2012

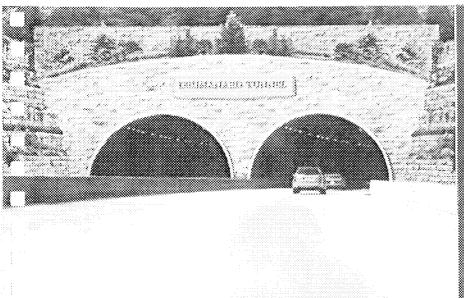
Documents (without regard to the submittal), in which event the Proposer will not be entitled to modify its Proposal or obtain a Change Order for additional compensation or a time extension under the Agreement).

• The deviation with respect to <u>Tunnel Drainage</u> appears to be within the requirements of the RFP and does not qualify as an ATC (<u>provided</u>, <u>however</u>, that should it turn out that the concept as incorporated into the Proposal is not within the requirements of the RFP, IFA reserves the right to require compliance with the requirements of the RFP and PPA Documents (without regard to the submittal), in which event the Proposer will not be entitled to modify its Proposal or obtain a Change Order for additional compensation or a time extension under the Agreement).

If the Proposer wishes additional clarifications regarding an ATC submittal, the Proposer may provide a written request for clarification under <u>Section 2.3.1</u> of the ITP.



CONFIDENTIAL



# Ohio Riva Bridges Project Me Essablidaesing Gmildende AVS

ATCHNO 14

### Submitted to:

Isdiana Finance Authority One North Capitol Avenue, Suite goo Indianapolis, Indiana 46204 Attention: Jacob Blasdol Telephone: 317,234,2113

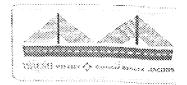
Fax: 327.232.6786

Email Address: dq@ifa.in.gov

# Submitted by:

VVV Cast End Partners

WVB East End Partners 2260 East Summit Street Crown Point, Indiana 46307 Phone: 316.207.3605



WVB East End Partners (WVB) submits the following ATC to IFA for review and approval per the requirements of the East End Crossing ITP.

### PART 1: OVERALL DESCRIPTION OF THE ATC

(a) Segrential ATC number identifying the Proposer and the ATC number

### WVB East End Partners

# ATC No. 14 - Optimize Tunnel Cross Section and Fire Life Safety

Please note that the following ATC replaces the previously submitted ATC No. 7 as noted below in part (b).

(b) Description and conceptual drawings of the configuration of the ATC, including necessary design exceptions and a traffic operational analysis, if applicable.

# Conceptual Drawings Attached

WVB East End Partners proposes to optimize the tunnel geometry by applying the latest NFPA 502 fire life safety and ASHTO code-based requirements as stated below.

- 1. Optimize the overall tunnel cross section by applying code-based requirements to the use of walkways and travel-way configuration, including:
  - a. Reducing the walkway width on the cross-passage side
  - b. Reducing the walkway width on the non-cross-passage side
  - c. Optimizing the travel way configuration
- 2. Reduce the number of cross passages.
- Install a Carbon Monoxide Sampling System such as MultiGard Gas Sampling by MSA or equal that is designed for a single cross passage configuration with sampling probes taken along the tunnel tube.
- 4. Provide a 3% AFFF Foam based fixed fire suppression system throughout the tunnel.
- 5. Reduce spacing for tunnel drain inlets from 200 ft to 75 ft apart to reduce the flammable liquid fuel size.
- 6. Use the noted systems above in conjunction with ventilation and other fire life safety systems to reduce the design fire size from 300MW to 50MW.

Please note that in the Final RFP released July 31, 2012, there are no requirements for the tunnel walkway widths. However, during the ATC 10n1 Meeting held on August 8, 2012, it was stated by IFA that an addendum will be sent out to reflect the required walkways widths. In anticipation of this revision, WVB assumes that the required widths will be as shown on the IFA provided RID drawings. If the final requirements are more stringent than as shown on the RID drawings, this ATC will still apply as a reduction from those requirements and then the ATC will provide IFA/KYTC with a further increase in savings from the more stringent requirements to this ATC design.

(c) ATC locations and Explanation of how the ATC will be used on the East End Crossing

As described above item (b), the ATC location is the entire tunnel and cross passage. The ATC will be used to optimize the tunnel geometry, while improving tunnel safety and maintaining all Code requirements for Fire, Life Safety and geometric tunnel design.

### PART 2: DISCUSSION OF CHANGES FROM THE ATC

### SUMMARY OF CHANGES FROM ATC

(d) Roadway Operations	(e) Capital Maintensince	(f) Handback Requirements	(g) Life of Item	(h) Reduction in Completion Time
No	Yes	No	No	Yes

(d) Description of charges in roadway or operations requirements associated with the ATC, including case of operations.

The reduced shoulder width in the final configuration will not change the readway operations as a result of this ATC. The walkway width and other noted changes will not affect the readway of operations requirements.

 (e) Description of changes in routine or capital maintenance requirements associated with the ATC, including case of maintenance.

Through reductions in overall internal tunnel surface areas, this ATC will result in the reduction of tunnel utilities (ITS, lighting, ventilation...) and therefore reduce the long-term tunnel maintenance costs. Additionally, the tunnel utilities are planned to all run along the 2'-6" wide walkway on the cross-passage side, and tunnel geometry allows for utility conduits and boxes to fall within the concave tunnel section. This allows for a clear width of 2'-6" for the walkway, plus additional width from knee level to head level, and will not change the maintenance requirements. Overall, this ATC provides a reduction in maintenance work for KYTC and will provide for an ease of maintenance.

(f) Description of changes in Handback Requirements associated with the ATC

Not applicable

(g) Description of changes in the anticipated life of the item(s) comprising or affected by the ATC.

WVB projects that a longer life will result for the tunnels from the ATC due to enhanced fire protection.

(h) Description of any reduction in the time period to reach Substantial Completion resulting from implementing the ATC, including, as appropriate, a description of method and commitments.

The Drumanard Tunnel construction is on the project critical path. Reduction of the tunnel cross section area and cross passage reduction will result in a reduction in excavation quantities and a

more effective geometric design. This design will provide for more overhead rock cover and allow for quicker excavation and installation of the tunnel final liner. The cross-section reduction and increased efficiency will allow for a quicker completion of the tunnel. Additionally, the reduced interior section will require less tunnel utilities to be installed and again shorten the overall tunnel construction schedule. The overall tunnel construction schedule reduction from this ATC will allow WVB to open the entire East End Crossing to traffic earlier than the required Substantial Completion date and will allow for IFA to start tolling collection sconer than would otherwise begin.

### PART 3: ATC ANALYSIS AND JUSTIFICATION

(i) References to requirements of the RFP which are inconsistent with the proposed ATC, an explanation of the nature of the deviations from said requirements, and a request for approval of such deviations.

### Tunnel Roadway Width

Table 9-3 KY 841 Design Data in Section 9.3.4 calls for the typical section through the tunnel to include a 4-foot inside paved shoulder, two 12-foot lanes and a 12-foot outside paved shoulder (40-foot total pavement). This allows for a final 3-lane configuration of three 12-foot lanes and two 2-foot shoulders. The ATC requests a two foot total reduction in shoulder width which follows AASTHO tunnel standards (38-foot total pavement). In the interim configuration, the inside shoulder will be reduced from 4-feet to 2-feet with all travel lanes and outside shoulder as required. With the final configuration, the 2-foot inside and outside shoulders will be reduce to 1-foot shoulder each. The 1-foot shoulder width is the minimum allowable by AASTHO tunnel standards and would only be required if and when KY841 is widen to a 6-lane configuration. The reduction of the shoulder widths and tunnel cross-section layout are shown on the provided drawing.

### Walkways and Tunnel Width

As noted above, in the Final RFP released July 31, 2012, there are no requirements for the tunnel walkway widths. However, during the ATC 1 on I Meeting held on August 8, 2012, it was stated by IFA that an addendum will be sent out to reflect the required walkways widths. In anticipation of this revision, WVB assumes that the required widths will be as shown on the RID drawings.

The RID drawing HIGHWAY TUNNEL FINAL PRELIMINARY DESIGN SUBMITTAL. Drawing C-001 "Northbound Highway Tunnel Section" shows emergency walkway of 3'-7" on the cross-passage side and a 2'-6" service walkway on the opposite side. As stated in the ATC description, WVB proposes to optimize the tunnel cross section by reducing the walkway on the non-cross passage side and providing at least 1'-6" clearance in accordance with AASHTO tunnel clearance requirements, and reducing the walkway width on the cross passage side to 2'-6" clear in accordance with AASHTO desirable tunnel clearance requirements. Wall mounted tunnel components will not encroach on the 2'-6"-wide by 7-foot-high clear space around the walkway.

### Cross-Passage

Book 2, 16.2.7 reads "Cross-passages connecting the northhound and the southhound immel bores shall be designed and spaced as per NFPA 502 requirements." We comply with this requirement, but want to clarify our compliance with the proper application of the NFPA 502 Standard requirements. WVB proposes to install one single cross-passage near the mid-point of the tunnel structure and as part of the namel evacuation plan, the tunnel roadway section will be utilized as part of the agress routes in addition to the tunnel cross-passage as stated and allowed for in NFPA 502.

### Carbon Monoxide Monitoring System

Book 2, 17.2.2.5 reads "Furnish and install carbon monoxide monitoring system (COMS) including pumps, filters, switches, flowmeters, CO detection cells, readout control modules, and calibration equipment.... Each CO sensor shall be located at the monitoring point" We propose to install COMS system in the cross passage, rather than in the tunnel at the monitoring points, to protect them from direct exposure to the tunnel environment and tunnel power washing.

### Fire Suppression

Book 2, 17.2.2.1 reads "Fire protection and suppression features shall include but not be limited to standpipe systems, fire hose cabinets, portable fire extinguishers, fire hose valve stations, and smoke/heat alarm systems... Fire suppression in the form of sprinklers or misting system shall be considered to limit fire magnitude." As stated within our ATC description, we are proposing to exceed these requirements and to provide a 3% AFFF Foam based fixed fire suppression system throughout the tunnel. The design will be performed in accordance with NFPA 11 and NFPA 16 for foam systems with foam supply good for 1 hr of protection with up to 2 x 100-ft zones activated simultaneously. It is well known in fire engineering that the only effective way to control and extinguish a flammable liquid fire is by foam application. While other sprinkler or misting systems are cost effective, there is no tested evidence of their capabilities to impact flammable liquid fires. Moreover, it is well known that water application on some fuels may lead to an explosion.

### Tunnel Drainage

Book 2, 16.4 reads "Collection of ranoff at portals and in the vehicular tunnels via drop inless at maximum 200-foot intervals, with longitudinal pipework to sumps, and cleanout connections, as necessary." As stated within our ATC description, we are proposing to exceed the 200-foot spacing requirements and to provide drain inlets at 75-foot spacing. This significantly reduces the flammable liquid spill area and associated pooling, resulting in a reduced fire size of the flammable liquid pool to 50 MW.

(j) Analysis justifying use of the ATC and why the deviation, if any, from the requirements of the REP should be allowed.

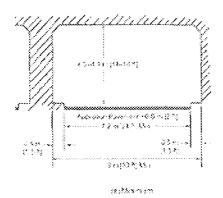
This ATC is presented as a full package. The fire life safety system is a performance based system, where sufficient fire protection can lead to relaxed egress requirements, while insufficient fire protection should lead to the enhanced egress and structural requirements.

The modification to the Travel way width depicted in the RID is justified through this ATC as follows:

According to AASHTO and FHWA Technical Manual for Design and Construction of Road Tunnels – Civil Elements Section 2.3 "The curb-to-curb (including shoulders) clearance is also required to be 2 ft greater than the lane width of the approach travel way." Consider that the approach travel lanes are 12 ft wide and with allowance for a future third traffic lane in the tunnel, the curb-to-curb clearance shall be 12' wide x 3 lanes ÷ 2' = 38 feet. The attached drawing depicts the code-based roadway width requirement.

The modification to the Walkways depicted in the RID is justified through this ATC as follows:

NFPA 502, Section 7.15.6.3.1, states that the tunnel roadway surface, when supported by a traffic management system, shall be considered as a part of the egress pathway. WVB proposes a traffic management system which will allow the tunnel roadway surface to be considered as a part of the egress pathway, and walkways shall not be required for egress purposes. However, we understand that tunnel walkway is required for tunnel maintenance. WVB propose to provide maintenance walkway on the cross-passage side which will meet AASHTO Desirable Clearance requirement and will not be less than 2.5 ft wide clear and wider at knee to head level based on the more effective tunnel geometry.



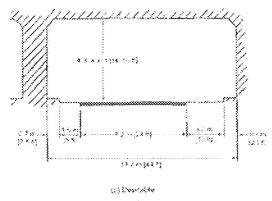


Figure 2. Typical Tunnel Cross Section from AASHTO (2004) and FHWA Technical Manual for Design and Construction of Road Tunnels - Civil Elements 2010

### Cross-Passages

NFPA 502, 2011 edition, provides definition of emergency exits. Section 3.3.17, Emergency Exits, reads: Portal or "exit," including egress stairs or egress corridors leading to an area outside of the tunnel; or cross-passages leading to an adjacent non-incident tunnel.

NFPA 502, Section 7.15.6.2 states that spacing between exits for protection of tunnel occupants shall not exceed 300 m (1000 ft). Required spacing shall be determined by consideration of the following factors:

- (1) Category, including types and classes of tunnels
- (2) Design fire size and fire/smoke development
- (3) Egress analysis
- (4) Fire life safety systems analyses to provide tenable environment in tunnel in accordance with 7.15.2. This includes type and operation of tunnel ventilation, detection, fire protection, and control systems
- (5) Traffic management system
- (6) Emergency response plan

(7) Consideration of uncertainties of people's behavior during a fire event and of those who are unable to self-rescue."

We propose an AFFF Fixed Fire Suppression system for fire protection to control the fire and minimize the fire size to not exceed 50 MW. This is the only proven fire suppression technology used worldwide to protect from flammable liquid fires. The combination of fire suppression, enhanced tunnel drainage and effective fire detection and ventilation systems provides for the required protection. This allows for an increased spacing between emergency exits for the protection of funnel occupants up to 1000 ft, which for the Ohio River Bridge Crossing, results in a single cross passage requirement.

# Carbon Monoxide Monitoring System

Several tunnel agencies across the country expressed their concerns having CO sensor located in the tunnel due to the need for power washing of tunnel walls. We propose to install COMS system in the cross passage, where all of the calibration and maintenance can be done from the cross passage.

### Fire Suppression

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NFPA 502 Section 9.1.1 states: Water-based fire-fighting systems shall be permitted in road tunnels as part of an integrated approach to the management of fire and life safety. 9.2.1 The goal of a water-based fire-fighting system shall be to slow, stop, or reverse the rate of fire growth or otherwise mitigate the impact of fire to improve tenability for tunnel occupants during a fire condition, enhance the ability of first responders to aid in evacuation and engage in manual fire-fighting activities, and/or protect the major structural elements of a tunnet. 9.2.2.1 Fire Suppression System. Fire suppression is the reduction in the heat release rate of a fire by a sufficient application of water. Fire size shall remain reduced over the design discharge duration. Section E4 states: The system should be designed with enough water and/or foam capacity to allow operation of at least two zones in the incident area. Section E5.6 states: One example for the use of water-based fighting for tunnel protection is to use foam additives to protect against possible flammable liquid fuel or chemical fires. The feasibility of the use of foam-water sprinkler systems against pool fires was investigated in large-scale fire tests conducted in the Memorial Tunnel. Diesel pool fires with heat release rates of 10, 20, 50, and 100MW were used in the test program. The water density with foam additives (3% AFFF) ranged from 2.4 mm/min (.1 in./min) to 3.8 mm/min (.15 in./min). It was reported that the fires were extinguished in less than 30 s in all four tests. The effectiveness of the deluge foam-water sprinkler system was not affected by a longitudinal ventilation velocity of 4.2 m/s (827 fpm).

We propose a 3% AFFF (foam) system with foam supply good for 1 hr of protection and with 2 zones of activation. In accordance with the tests and studies, such a system is the only system

capable of fire control for <u>tlammable liquid</u> fires, and with the proposed fire detection system, will stop the ultra fast growth rate fire at 50 MW with further fire size reduction.

### Tunnel Drainage

NFPA 502 Section 7.12.2 states that the drainage collection system shall be designed so that spills of hazardous or flammable fiquids cannot spread or cause flame propagation. NFPA 502 Section A.7.14.1 Large flammable and combustible liquid fires in tunnels are typically oxygen-limited fires; however, another method to control the fire is to control the surface area of the pool spill by draining the liquid before the spill surface area grows to size. Controlling the surface area would reduce fire size, burn time, fire growth rate, and the consequent smoke propagation by reducing the burning area of liquid.

We propose to provide drain inlets at 75 ft spacing to reduce spill pooling, thus reducing the fire size, burn time, fire growth rate. This approach allows the effective fire size to be limited to 50 MW.

### Schedule

As noted in section (h) above, the tunnel is on the project's critical path and the more efficient cross-section will provide a reduction in time for WVB to reach substantial completion. This improvement on the overall schedule not only allows for IFA to start collection of toils sooner, but also reduces the timeframe in which the local community is subject to temporary construction impacts. The reduced construction impacts and overall construction schedule are additional benefits that IFA will realize with approval of this ATC.

(k) Preliminary analysis of potential impacts on vehicular traffic (both during and after construction), community impact, safety, and life-cycle East End Crossing and infrastructure costs, including impacts on the cost of repair, including and operation.

No changes in anticipated on vehicular traffic both during and after construction will result from the ATC.

### Fire/Life Safety for tunnel occupants and structural protection

The best way to assure safety of tunnel occupants, the tunnel structure, and first responders is to stop/control the fire and minimize fire growth. This is proposed to be achieved through the use of fixed fire suppression system and enhanced drainage system. We propose a 3% foam-based system as the only effective system for tlanmable liquid cargo fires. The Technical Provisions call for design based on a design fire size as determined by an assessment of the expected type of vehicles utilizing the tunnel, but shall not be less than 300MW (based on tanker truck in the tunnel, as noted in NFPA 502, Annex A). Application of the Technical Provisions in their current form will result in temperatures exceeding the limits of any mechanical / electrical equipment on the market today. Other methods, such as passive structural fire protection will increase the temperature inside the tunnel and will not allow for heat dissipation into the soil. Our proposed ATC improves safety for namel occupants, and utilizes tested systems and

equipment to control the potential fire size and minimize fire growth, while maintaining the integrity of the structure and life safety equipment.

### Safety of First Responders and assistance in fire fighting operations

As written in the Technical Provisions, fire sizes approaching 300 MW are far in excess of what local first responders will be able to effectively mitigate through traditional emergency response and fire fighting techniques. As outlined above, our approach makes use of effective detection and suppression systems to identify, control, and minimize fire growth, which allows first responders the ability to better manage evacuation and improve fire fighting operations. The end result is improved safety for occupants and first responders.

### Community Impact

Reduction in the overall tunnel cross section and more effective tunnel geometry will provide a nearly 8% reduction in tunnel excavation quantity and a reduction in the material quantity requirements for the tunnel liner. These quantity reductions directly reduce impacts to the local communities and environment by reducing the required rock blasting (noise & dust impacts), reduction in truck traffic (noise, dust, local road, and environment impacts), reduction in earbon footprint impact, improvement to traveling public safety during construction, and improved project sustainability.

### Long Term Maintenance

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Reduction in the overall tunnel cross section and use of a fixed fire suppression system reduces the scope requirements of other life safety systems, such as ventilation, detection, and lighting. This further reduces electrical load requirements, and the cost and maintenance of the ventilation system. While maintenance will be required for the fire suppression system, its energy consumption will be much less than the ventilation system consumption, thus reducing overall maintenance costs. With this ATC, the Maintenance Walkway is retained on the left-hand side of the tunnel, which provides access to tunnel elements and appurtenances requiring maintenance are positioned on the cross-passage side or in the tunnel crown, which is readily accessed via the provided walkway or by means of lane closures for access to tunnel crown areas. The internal cross-section reduction further reduces the quantity requirement of many tunnel utilities such as lighting, sprinklers and drainage. This will further reduce the long-term maintenance costs incurred by KYTC.

(l) Preliminary unalysis of potential impacts on environmental permitting (including comparison to the NEPA Approvals and an analysis of whether the Proposer believes an updated or supplemental EIS would ar would use be required and why).

No impacts to environmental permitting will result from the ATC.

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in) Additional right-of-way regained to implement the ATC.

No additional right-of-way will be required to implement the ATC.

(a) **Description of other projects where the ATC has been used**, the degree of success or failure of such asage and names and contact information including phone manthers and e-mail addresses for project owner representatives that can confirm such statements.

All the New York tunnels, such as Holland Tunnel, Lincoln Tunnel, Brooklyn Battery Tunnel, Queens Midtown Tunnel; Virginia tunnels such as Hampton Roads Bridge Tunnel and Monitor Merrimac Memorial, Big Walker Mountain, East River Mountain; and other US tunnels have shoulders of 1 ft or less, which meets AASHTO minimum requirements.

- Port Authority of New York and New Jersey
  Tunnels, Bridges and Terminals Division
   Montgomery Street, 4th Floor, Jersey City, NJ 07302
  Phone: 201-360-5000
- New York Metropolitan Transportation Authority Bridges and Tunnels
   James Ferrara – Acting President
   347 Madison Avenue, New York, NY 10117
   Phone: 877-690-5116
- Virginia Department of Transportation
   Dave Merinar
   1401 E. Broad Street
   Richmond, VA 23219
   Email: dave.merinar@vdot.virginia.gov

Battery Street tunnel, I-90 First Hill Tunnel, Mt. Baker Ridge tunnel, and I-5 tunnels allow for flammable liquid fuel tankers and are protected with the 3% AFFF Foam System (examples can be found in NFPA 502 Table E-3). A new Fort Lauderdale Airport tunnel under design will also be protected with the 3% AFFF system, as it also allows for the fuel tankers to get through the tunnel.

 Broward County Florida Aviation Department Kent George, Director of Aviation 100 Aviation Blvd, Ft. Landerdale, FL 33315 Phone: 95-359-610

The proposed CO monitoring system is an industry standard system, which can be found in most of the US tunnels.

Enhanced drain inlet concept is also applied in Seattle tunnels for reduction of the pool fire size.

 Washington Department of Transportation Andrea W. (Transportation Improvement Board) 505 Union Ave SE, Suite 350, Olympia, WA

Phone: 360-586-1140 Email: andreaw@tib.wa.gov

(a) Description of added risks to IFA, the Department or third parties associated with implementing the ATC.

No added risks to the IFA, the Department, or third parties will result from implementing the ATC. Moreover the application of the 3% AFFF defuge system will lead to improved safety of the First Responders.

(p) Estimate of any additional IFA, the Department, Developer and third party **costs associated** with implementation of the ATC;.

3% AFFF foam may lead to some additional maintenance costs. However, other maintenance costs will be minimized due to reduced tunnel cross section and number of cross passages, which results in smaller mechanical, electrical and control systems.

 (q) Estimate of any savings and additional toll or other revenue that would accrue to IFA and the Department should the ATC be approved and implemented.

In addition to the initial construction cost savings to IFA, this ATC will result in a substantial long-term O&M costs savings throughout the life of the tunnel due the reduction in the tunnel systems (mechanical, electrical and structural protection costs savings) as noted above.

(r) Analysis of how the ATC is equal or better in quality and performance than the regularements of the RFP.

Overall, the ATC results in heightened safety for tunnel users, structure and First Responders with the inclusion of the enhanced tunnel fire suppression and fire life safety systems. The fire protection quality provided here within is much higher than for the misting system that is allowed by the final RFP. There are a multitude of operational and functional concerns for water misting fire suppression system that are alleviated by the foam suppression system that this ATC incorporates. Included in these concerns is the misting systems inability to align with the ventilation system, and the exposure of spreading the fire with a pure water suppression system. WVB's ATC provides a superior fire suppression system than as required per the RFP and will provide IFA, KYTC, first responders and the traveling public a higher level of safety. The addition of the foam suppression system, additional drainage inlets, more efficient cross-section, new carbon monoxide detection, fire detection system and compatible ventilation system will come together to drastically decrease fire intensity and fire spread and dramatically increase safety.

Additionally, the more efficient cross-section will reduce the required liner reinforcement and allow for a more suitable reinforcement size and spacing. Due to the tight constraints in which

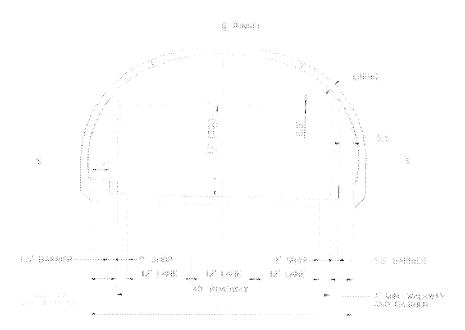
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the reinforcement is to be installed above the formwork, the ATC will improve the construction safety of those placing the material. The increased reinforcement spacing will allow for proper concrete consolidation between the bars and provide a higher quality concrete liner.

Lastly, as noted in many of the sections above, WVB's ATC #14 will provide IFA and KYTC with a multitude of benefits during construction and throughout the lifetime of the tunnel. These benefits range from reduction of temporary impacts and maintenance costs to improved safety for First Responders by providing the most effective fire protection and life safety systems.

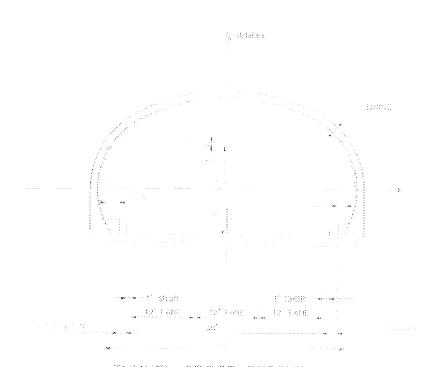
(s) Preliminary analysis of potential impacts on the MAP.

WVB's ATC #14 will provide a substantial reduction in construction costs of the Drumanard Tunnel. Based on the revised RFP dated June 22<sup>nd</sup>, 2012, the reduction to the MAP is estimated to be a minimum \$620,000 discount. This MAP deduction equates to a Net Present Value reduction of over \$12 Million savings to IFA. This MAP reduction is in addition to the significant maintenance savings that IFA / KYTC will realize throughout the lifetime of the tunnel.



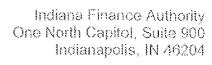
TUNNEL CROSS SECTION — RID ROADWAY AND WALKWAYS

BASE DESIGN



TUNNEL CROSS SECTION — 4' LT SHDR. 10' RT SHDR. REDUCED WALKS

AIC DESIGN





August 24, 2012

Sidney Florey, Project Executive VVVB East End Partners 1260 East Summit Street Crown Point, Indiana 46307

RE: East End Crossing RFP, ATC WVB #15

Dear Mr. Florey:

The Indiana Finance Authority ("IFA") has reviewed Alternative Technical Concept ("ATC") no. WVB #15 submitted on August 17, 2012 by WVB East End Partners in response to the Request for Proposals for the East End Crossing issued by the IFA on July 31, 2012 (as amended, the "RFP").

IFA's response to the referenced ATC is included in Attachment 1.

IFA appreciates your continued interest in the East End Crossing.

Sincerely,

Jacob Blasdel

IFÁ Project Manager

Attachment

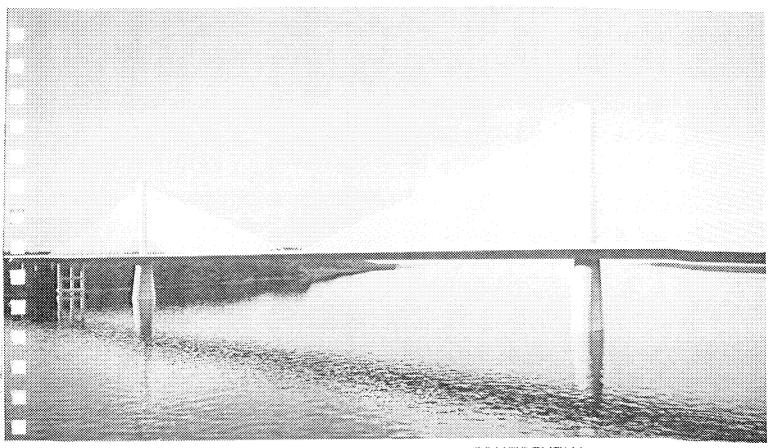
# ATTACHMENT 1

### WV8 East End Partners

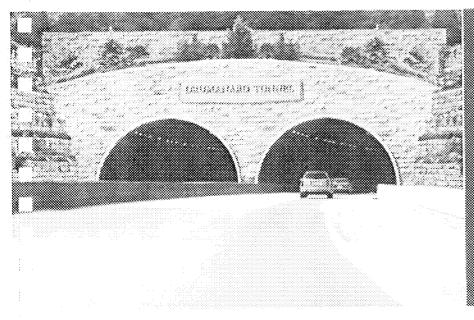
August 24, 2012

- ATC WVB #15 The ATC is acceptable for inclusion in the Proposal with the following conditions:
  - The Proposer shall include full depth inside shoulders matching the mainline pavement section.
  - · The Proposer's design shall meet one of the following two criteria:
    - The Proposer's outside shoulder pavement thickness shall be the same depth as the mainline pavement where the two pavement sections abut. The shoulder pavement may then taper to no less than 6 inches at the outside edge, or
    - 2. The Proposer shall design the outside shoulder pavement for a five (5) year cumulative traffic loading in year 35.
  - The Proposer shall be responsible and bear the schedule and monetary risk of any modifications to any Environmental Approvals required for or arising out of this ATC.
  - The Proposer shall be responsible and bear the schedule and monetary risk of any new or modified Governmental Approvals required for or arising out of this ATC.

If the Proposer wishes additional clarifications regarding an ATC submittal, the Proposer may provide a written request for clarification under <u>Section 2.3.1</u> of the ITP.



CONFIDENTIAL



# Ohio River Eriologs Project The Essectic Gossing Confidential ATCS

ATC - No. 15

# Submitted to:

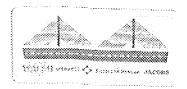
Indiana Finance Authority
One North Capitol Avenue, Suite 900
Indianapolis, Indiana 46204
Attention: Jacob Biasdel
Telephone: 317.234, 1113
Fax: 317.232.6786

hax: 317.232.8786 Entail Address: rfg@ifa.in.gov

# Submitted by:

WW East End Partners

WVB East End Partners 1266 East Summit Street Crown Point, Indiana 46307 Phone: 315,207,3995



WVB East End Partners (WVB) submits the following ATC to IFA for review and approval per the requirements of the East End Crossing ITP.

# PART 1: OVERALL DESCRIPTION OF THE ATO

(a) Seniontial ATC number identifying the Proposer and the ATC number

### WVB East End Partners

# ATC No. 15 Alternative Shoulder Pavement Design Section

(b) Description and conceptual drawings of the configuration of the ATC, including necessary design exceptions and a traffic operational analysis, if applicable.

WVB East End Partners (WVB) proposes that the shoulders of SR 265 and KY 841 within the O&M limits be WVB's responsibility to design and construct as a section type of WVB's choice. The Final RFP requires that the shoulder pavement section be constructed as the same section as the pavement that it adjoins. Since traffic is not planned to drive on the shoulders other than during emergencies, vehicle breakdowns and maintenance periods, the shoulders within the O&M section will be overdesigned beyond IFA's intended use. WVB proposes that it be WVB's responsibility to design and construct all shoulder pavements sections that are in line with the traffic and maintenance requirements, and more accurately reflect current standard practices. At a minimum, WVB requests approval to design and construct all ramp shoulders to current standard practice.

(v) ATC locations and Explanation of how the ATC will be used on the East End Crossing

The alternative shoulder pavement section will be used on the inside and outside shoulders within the O&M limits of Section 4 and/or Section 6.

### PART 2: DISCUSSION OF CHANGES FROM THE ATC

### SUMMARY OF CHANGES FROM ATC

	(d) Roadway Operations	(e) Capital Maintenence	(f) Handback Requirements		(h) Reduction in Completion Time
Strategic Constitution	No	No	No	No	No

(d) Description of changes in roadway or operations requirements associated with the ATC, including case of operations

Within the O&M fimits, it will be WVB's responsibility to maintain traffic even during maintenance activities and will therefore be responsible to ensure that there are no changes in roadway or operations requirements. This ATC presents the same level of service and same level of safety as the RFP requirements.

 (e) Description of changes in contine or capital maintenance regularments associated with the ATC, including ease of maintenance.

There are no anticipated changes in routine or capital maintenance requirements as no matter what shoulder design is developed, it will still handed over to IFA with the same requirements as if it was designed at the full pavement section.

(f) Description of changes in Hundback Regulrements associated with the ATC

There are no anticipated changes in handback requirements as no matter what shoulder design is developed it will still be handed back to IFA with the same requirements as if it was designed at the full pavement section.

(g) Description of changes in the anticipated life of the item(s) comprising or affected by the ATC.

The alternative shoulder sections will still be designed, constructed and maintained to provide the required handback requirements for the shoulder as noted in the Final RFP and still provide the same anticipated life as would otherwise be required.

(h) Description of any reduction in the time period to reach Substantial Completion resulting from implementing the ATC, including, as appropriate, a description of method and commitments

There will be no reduction in construction time period.

# PART 3: ATC ANALYSIS AND JUSTIFICATION

(i) References to requirements of the RFP which are inconsistent with the proposed ATC, an explanation of the nature of the deviations from said requirements, and a request for approval of such deviations.

Technical Provision (TP) 10.3.1 states that "All travel lanes and shoulders shall have the same structural section." This implies that the shoulders should be designed to sustain the same traffic loading as the mainline pavement which is not practical and does not provide IFA with value for money. TP 10.3.1 further states that "At Substantial Completion and at the Expiry Date, the Developer shall provide a consistent pavement type throughout each roadway element."

Additionally, in Table 9-3 and Table 9-4 of the Technical Provisions, there is a special feature requirement that paved shoulders shall consist of full-depth pavement that matches the travel lane pavement design.

WVB requests that these requirements of the RFP be eliminated and that the shoulders within the O&M limit be designed, constructed and maintained to provide the required level of operation and handback as currently required. This will ensure that IFA receives the most value for money.

(f) Analysis justifying use of the ATC and why the deviation, if any, from the requirements of the RFF should be allowed.

WVB believes that designing the shoulder section for the same structural capacity of the mainline pavement is an excessive requirement. The shoulder will not sustain traffic loading under normal operations, and will only be used by traffic during a maintenance of traffic event in which traffic is temporarily diverted to the shoulder. It is also anticipated that during the life of the pavement, the total duration when traffic is using the shoulder will be equal to or less than one year of equivalent loading. The shoulder pavement thickness would be designed for a one year cumulative traffic loading in year 35. This will provide a more economical section that is structurally adequate for its intended use.

Guidance from Federal Highway Technical Advisory T 5050.29 Paved Shoulders recommends that for concrete shoulders:

"As an option for other than urban freeways and expressways, a tapered shoulder may be considered. Adjacent to the mainline, the shoulder should be the same thickness as the mainline to permit mid-depth tiebar placement and to provide structural support for track wheel encroachments. The shoulder may then be tapered to no less than 6 inches at the outside edge."

And for asphalt shoulders:

"For other than tuban freeways and expressways, a structural section less than that of the mainline may be warranted. It is recommended that the thickness be based on an evaluation of life-cycle costs and past performance under similar conditions."

Since Table 9-4 of the Technical Provisions classifies SR 265 as a rural freeway, the shoulder thickness should be determined according to Federal Highway Guidelines.

(k) Preliminary analysis of potential impacts on vehicular traffic (both during and after construction), community impact, safety, and life-cycle East End Crossing and infrastructure costs, including impacts on the cost of repair, maintenance and operation.

Regular maintenance is assumed to remain the same with this ATC shoulder pavement section and thus will not impact vehicular traffic, safety nor life-cycle costs. Community impacts will be slightly reduced from a reduction in asphalt or concrete materials that will need to be produced and trucked to the project site which in turn also improves project sustainability.

(t) Preliminary analysis of potential impacts on cavironmental permitting (including comparison to the NEPA Approvals and an analysis of whether the Proposer believes on updated or completed and supplemental EIS would or would not be required and vely).

None

(m) Additional right-of-way required to implement the ATC.

No additional right-of-way is required to implement this ATC.

(a) Description of other projects where the ATC has been used, the degree of success or failure of such usage and names and contact information including phone numbers and e-mail addresses for project owner representatives that can confirm such statements.

The use of different a different pavement section for shoulders on a highway is a standard in Indiana as described in *The Indiana Design Manual* Ch. 52 Figure 52-13G. The mainline is PCCP and the outside shoulder in this figure is described as 165 lb/yd<sup>2</sup> HMA Surface on 300 lb/yd<sup>2</sup> HMA Intermediate on Compacted Aggregate No. 53 Stone. This shoulder section is both different pavement type, and different structural section as the mainline pavement – similar to the request in this ATC.

HMA shoulder as shown in Chapter 52 has been used successfully on many DOT projects in the state of Indiana including 1-69 Contracts IR-33739; IR-33047; IR-33051; IR-33038, IR-33264; and SR 25 Hoosier Heartland Contract IR-30840-A. Additional projects include:

### 1-88 Reagan Memorial Tollway - Oak Brook, Illinois

Contact Info of Project Owner Representatives:

Paul D. Kovacs, P.E. - Chief Engineer (Himois State Toll Highway Authority - ISTHA)

Phone: 630-241-6800

### I-294 North Tri-State Construction - Illinois

Contact Info of Project Owner Representatives:

Paul D. Kovacs, P.E. - Chief Engineer (Illinois State Toll Highway Authority - ISTHA)

Phone: 630-241-6800

# 1-69 - Fort Wayne, Indiana

Contact Info of Project Owner Representatives:

Sam Sarvis, Major Projects Manager (Indiana Department of Transportation)

Phone: 812-890-6300

Email: ssarvis@indet.ia.gov

(a) Description of added risks to IFA, the Department or third parties associated with implementing the ATC.

None

tp) Estimate of any additional IFA, the Department. Developer and third party costs associated with implementation of the ATC:.

Name

(q) Estimate of any savings and additional toll or other revenue that would accrae to IFA and the Department should the ATC be approved and implemented.

None

(r) Analysis of how the ATC is equal or better in quality and performance than the requirements of the RFP.

Since the ATC and the RFP will both provide shoulder pavement sections that will sustain the anticipated traffic loadings, they are equal. The ATC shoulder pavement section provides better value since it is not designed in excess of the expected traffic load and still requires the same handback requirements to INDOT & KYTC as does the RFP. Additionally, the reduction in material production and shipment will reduce the projects overall Carbon Footprint.

(s) Preliminary analysis of potential impacts on the MAP.

WVB's ATC #15 will provide a reduction in construction costs of the Indiana Approach (Section 6) and portions of the Kentucky Approach (Section 4) as well as provide a reduction in the Developer's maintenance cost during the O&M period. Based on the revised RFP dated June 22<sup>nd</sup>, 2012, the reduction to the MAP is estimated to be a minimum \$200,000 discount of the MAP. This MAP deduction equates to a Net Present Value reduction over \$4 Million savings to IFA. Approval of WVB's ATC #15 will provide IFA with more value for money.

# EXHIBIT 2-E

# PRELIMINARY PROJECT MANAGEMENT PLAN

[attached]

# 4.1 Preliminary Project Management Plan

WVB's preliminary Project Management Plan (PMP) forms the core of the Integrated Management System (IMS) we implement to control delivery throughout the Project, including Quality, Safety, and Sustainable Management Plans. Combined, these plans ensure WVB delivers the Project efficiently, cost-effectively, and safely with minimal impacts on road users, local stakeholders, and the environment, in line with IFA's goals. The PMP accomplishes many goals:

- Outlines WVB's management approach, philosophies, systems, processes, and procedures.
- Presents organization and resources to achieve all Project objectives.
- Outlines interfaces with IFA, stakeholders, and the public to establish clear lines of communication.
- Encourages DBE and workforce diversity outreach for ultimate involvement of the community.
- Provides specific, interactive plans to pave the way for Project delivery.

The WVB management team is responsible for delivering efficient and effective systems while continually improving daily operations. The management plan is

One Years, One Project, One Community
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based on proven processes from each of the member organizations, which are combined into a unique project management plan that is ISO compliant.



Vertical integration is the foundation to the management philosophy for the WVB team; each member has a stake in every component of the Project. To successfully coordinate delivery of these components, WVB has integrated all management processes and procedures into a single IMS, which serves as the keystone of the WVB organization. WVB uses the IMS during the planning, delivery and monitoring of all activities to ensure the safe, sustainable, on-time and in-budget delivery of a high quality product.

### A.1.1 PROJECT MANAGEMENT APPROACH

The IMS provides the framework for the management approach in all Project stages; WVB requires all WVB employees, subcontractors, and suppliers to comply with it. The inputs that enable the development and implementation of the IMS include stakeholder, client and WVB partner requirements and expectations and JV parent companies' existing management systems, best practice and lessons learned. The principal output is full stakeholder satisfaction.

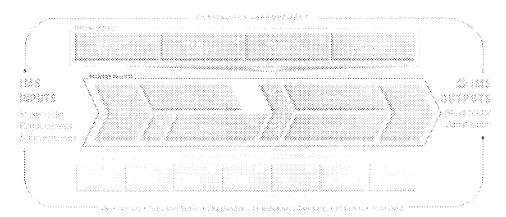
Strategic Processes necessary for WVB to manage Project development and delivery, as well as their interactions. Each strategic process within this top

level view is underpinned by a series of Management Processes. These are discussed in the relevant parts of our proposal as well as the Project Management Plan (PMP) in the Volume 2 Appendices. WVB's IMS is further explained in **Figure 4.1-1**.

All processes are documented through process charts. For each process, WVB produces associated documentation, including management plans, operational procedures, monitoring and reporting requirements, and work instructions. These are made available to authorized personnel (including subcontractors) via an interactive online version of the IMS (see Section 4.1.7).

#### WWW FIGURE 4.1-1 WYE INTEGRATED MANAGEMENT STRUCTURE

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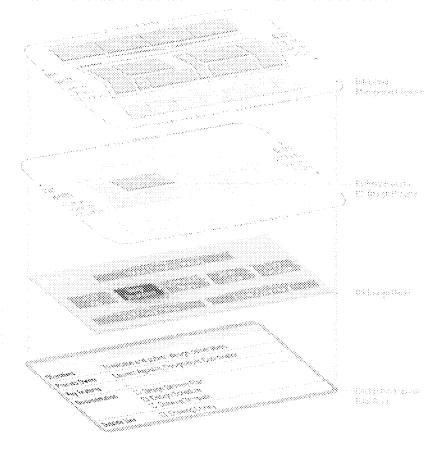
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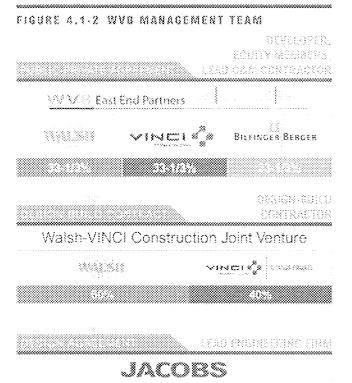
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### A. 4. 4. A. MANAGEWERT STRUCTURE A PERSONNEL

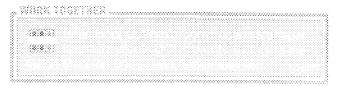
The WVB Team includes local and global leaders of the industry and is structured to show WVB's long-term commitment for the life of the asset and community. Key Personnel and Task Managers control the IMS. They were drawn from WVB members and have demonstrated experience and capability of their roles. In every process, the key members are reinforced by competent support personnel pulled from WVB's abundant resources to deliver the Project efficiently, safely, on time and within budget.

### 4.1.1.2.1 Organizational Structure

WVB has a design-build contract with the Walsh-WINCI CJV) comprising Walsh Construction Company (Walsh Construction) and VINCI Construction Grands Projets (VINCI CGP). Walsh-VINCI CJV has a design agreement with Jacobs Engineering (Figure 4.1-2). WVB's team is solidified with local advisors, subcontractors, and consultants, such as Milestone, James H. Drew, Guthrie/Mayes, and Third Rock Consulting. WVB's full organizational structure is illustrated in Figure 4.1-4, showing the relation between Project partners. Partners are grouped by their roles and assigned responsibilities based on the firms' proven abilities.



WV V 88 East End Partners



### 4.1.1.a.d Key Personnel

Each process identified within the IMS has an owner appointed by the WVB Steering Committee. Process owners are senior managers with direct responsibility for the delivery of that process. They have complete authority, competence and resources to:

- Disseminate procedures and objectives across the entire WVB team to achieve IFA goals.
- Collect, review, and report the process operation information to ensure satisfactory performance.
- Implement improvements and measure success against key performance indicators (KPIs).

The allocation of responsibility for each process generates the following benefits:

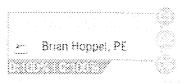
- An accessible single point of contact, accountable for performance.
- A clear focus on maintaining flexible processes and continuously improving WVB's approach.

The WVB project delivery structure continually evolves to maintain flexibility and response to changing Project needs. Figure 4.1-5 illustrates Key Personnel within the WVB organization throughout all Project phases.

Process owners are "flagged" in the organization charts as shown in Figure 4.1-3. Some processes have a unique owner for the whole Project (such as D1 Finance Delivery Process); some have an owner in the SPV and one in the CJV (such as C1 Strategy and Project Controls). Each Key Person's function and responsibilities are described in Table 4.1-1.

### FIGURE 4.1-3 PROCESS OWNERS

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# 1.4

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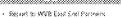
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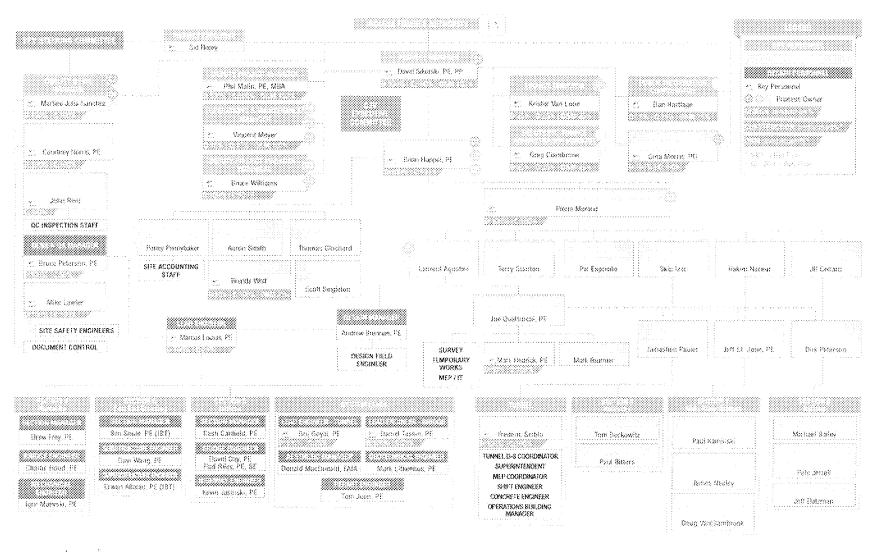
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Mayer Brown	Lead Legal Advisor
Cathani & Watkins	Lander's Legal Advisor
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Erast & Young	fas/Accounting Advisor
1873/kg	Insuracce Advisor
Muore McNei	Lander's Insurrance Advisor

Meestone	Section 6: Earthworks, Structures and Readway
Bissoice	Section 4: Brick Exception
Haydun Bridge Company	Section 4, Structures
Ageitain	Section 5: Structural Health Monitoring
James H. Drew	Project-Wide Decinical and ITS
Like Crestruction (DBE)	Section 6. Tracking and Utilities
Makesier & Association (DBE)	Sorfren b. Yourking Carmente, Flatwork, Jose Demonstra
Vibia-Teci:	Project-Wide Vibration Monitoring
PC\$:	Section 4: Tanavi Cansultant
Cachel & Associates	Section 4: Tunnel Geologist
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David Sikerski, Pč. FP	direct entire bean, and act as <b>single point of contact for IFA</b> • Lead tidegration of hiddren, construction, and orderations and	A COMPLIANCE MANAGER	Inspective the convergence of and reduce imposts     Provide service, training, and guidance on environment and	TERRETIRES THREE RANGECURE	Bolwer MVB objectives, sersify 6/A and sakeholder regementens, lake responsibility for Project safety.
PROJECT MAKACEN	interminate mariagement of all resources  Define, deploy, review and maintain the basiness vision, values and strategy.		sustainability issues during design and construction  Develop, review, and implement Plucic Involvement Pluci		<ul> <li>Report Project progress and performance to SPV and passed communities and project confinences improvement</li> </ul>
Pou Rain, PE, MBA Deput Poue£1	Report Project progress, and performance to IFA and Lenders     Whole the excel management     integrate OSAS and pendituration.	Dan HatHage POR E SECRETORI CONTORATIO	Fragolskily communicate and contribute to community statementures     Manage public mistions after Buist and d'A	Piorie Moraed SIII MANAGER & BRIDGE	Load design and construction; imprement field construction stategy, quality, taking, reversioned processes.     Ensure stategother design and construction requirements are nec.     Manage and achieve performance alreadies, develop and drive.
Medical Pr	ONISE Manager during G&M period     Overtise design and construction.		<ul> <li>Process the presimproses of the design and compromos with PPA and technical regulations.</li> </ul>	COHETRECTION MANASER	continuous improvention  • Responsible for all continuous contestions.
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Dépéry project Magager - Drance Magager - Drance Magager - Drance	<ul> <li>Coordinate and manage ficancial accounting and reporting, replanent mainst systems and processes as appropriate, controlled and manage statutory accounts infocuration, audit observate, and cash foregoiny representations.</li> </ul>	age threaded accreations and reporturing retains and processor to appropriate.  age statisticity accreams preparation, audit transport transported Frederic Scibilio intain, and report for MS for effective Transport	Centrual Project sudds for decom quatric compliance     Lead and direct familel constituction, ordane women safety	John Reid 0988 (BUCTION DURKITY CONTROL MERPHONIK	Engure conglished with EPA sequentments, and EFA and Scale dustrying content     Study sequenting     Study search selffer my in case of network places
M884008	<ul> <li>Disvelop, review, maintain, and retroit the MS for effective gentlemence, champion continuous corprovement</li> </ul>		Ensure all (FA and stakeholder fundet requirements are entereded.     Addieve performance objectives and drive continuous improvement.		<ul> <li>Manage GC learn, our site and external independent lateratories according to program requirements</li> </ul>
Martine Julia-Funches Cuality & MEACH SORTY	NOTE STATE OF A STATE DESCRIPTION OF SEPARATION OF SEPARAT	Mark Heatigh, Pf	<ul> <li>Monage permanent service (gas, electricity, water) resortionation and protection</li> <li>Clube with author-lies and service provides to entire interview.</li> </ul>	Mike Lawter	Onselon, mainten, and manage health and safety activities     Ensure safety exceeds expectations of IPA and WVB parmers
SWANEL YOU ERANGEMEET	<ul> <li>Assess, maintain, and repret coexistency with research law, Wolfl policies, project objectives; feed audit program</li> <li>Maintgle profiley control team, quality assertines reporting, and salety</li> </ul>	mark medice, i.e. Singlik mendeka	Classification and profilested     Classification in a construction in the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the construction of the constr		Audit, inspect, from manage, and continuously memore in oil assess of salety.

# 4.1.1.a.iii. Task Monoger Qualifications & Experience

WVB staffs the Project with only suitably qualified and experienced personnel (SQEP). For all positions, a SQEP form establishes responsibilities, required experience, and qualifications. These qualifications are specific to each position, but include general training such as OSHA 30, cost control, quality, and leadership training.

Candidates are selected, tested, and appointed based on the criteria in the SQEP form. WVB used this process (see **Figure 4.1-6**) to select competent Project leaders. Key Personnel, and Task Managers from our member's current staff (see **Table 4.1-2**).

Project-specific training is provided to ensure Task Managers exceed SQEP standards and continuously improve. Regular performance reviews are conducted and reviewed with the SQEP forms to maintain Task Manager quality and identify potential growth opportunities. Potential Task Managers are trained as part of their personal development plan so they become SQEP.



# FIGURE 4.1-6 WVB'S SQEP PROCESS

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Elegangers who are recularly trained and syspopolic.

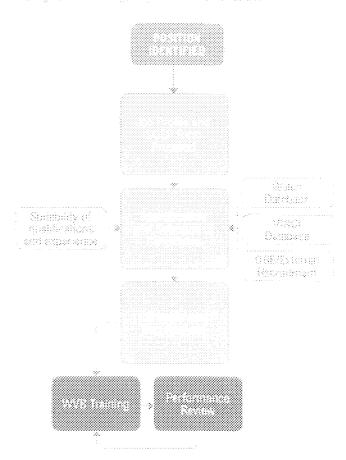


TABLE 4.1-2 PROPOSED TASK MANAGER QUALIFICATION REQUIREMENTS

Station	41241311231411		
Section Project Managers	Construction Engineering degree/MBA or equivalent experience	15-25 years in major construction projects (including design-build) and worked in a JV	Skip Izac, JR Collard, Hakim Neceur
Superintendents	Adequate experience and training	15-25 years in construction 5-10 years in their area of responsibility (Tunnel/cable stays/bridge/roadways)	Pete Jerrell, Paul Kaminski, Jeff Datzman, Paul Bitters
Field Engineers	Construction Engineering/ Management Degree or equivalent	3-10 years in construction	Doug VanSlambrook
Design-Build Coordinators/Engineers	Civit Engineering degree or equivalent	8-15 years in construction/engineering including design-build	Laurent Agostini Jue Qualtrochi, Dirk Peterson, Sebastien Paulet, Jeff St. John
Safety Managers	Safety Management degree/equivalent experience	10-15 years in safety management	Mike Lawler
Design Section Managers	Registered Professional Engineer in Indiana/ Kentucky	15-25 years in construction/engineering in relation to specific area of activity	Ben Soule, Cash Canfield, Andrew Frey

#### 4, 1, 1, a, iv. Correst & Projected Worklead

Although a significant Project, IFA can be confident that WVB is fully resourced for safe, on-time delivery of the Project through our vast financial, staff, and equipment resources available locally and internationally. WVB's workload and backlog is detailed in **Table 4.1-3**.

WVB draws from over 250,000 employees of VINCI's and Jacobs' worldwide operations and Walsh's North American operations. The workforce requirement for this job is less than 1% of our current workforce.

Of particular benefit to IFA is WVB's local presence; we draw on an experienced workforce familiar with local conditions and standards. WVB partner Walsh Construction has averaged over one million trade hours per year over the past three years in Kentucky and Indiana and is on pace to use 1.4 million trade hours by the end of 2012. This equates to approximately 650 trade employees in Indiana and Kentucky. In addition to our own local experience, we expect major participation from local subcontractors such as Milestone, Haydon Bridges and James H. Drew.



WVB's locally-available equipment and facility resources are supported by additional global resources. WVB Team Partners' local equipment (Figure 4.1-7) includes:

- \*\* ±\$400 million of owned equipment
- Over 7,500 pieces of equipment
- 210 marine pieces including 2 ringer cranes
- \* 119 cranes including 9 tower cranes
- 500+ earth moving and paving pieces of machinery

The East End Crossing Team is independent from any other project including the Downtown Crossing and U.S. 31. Key personnel and Task Managers are selected and have been involved and committed to this Project.

#### FIGURE 4.1-7 LOCAL EQUIPMENT

WVS train demisér's équiument le pédisible seu casey te contièm



TABLE 4.1-3 WVB MEMBER WORKLOAD AND BACKLOG

	0	0	\$100 million
1910 Parker 111	\$9.1 billion	\$260 million	\$570 million
	\$337 million	\$7.8 million	\$524 million

Concession Consession	Process Volume 2016	A CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONTROL OF THE CONT
\$4.1 billion		\$6.7 billion
\$610 million	\$1.1 billion	\$2.7 billion
\$11 billion	\$12.5 billion	\$15.6 billion

#### 4.1.1.8 INTERNAL ONSAHIZATION SYSTEMS

Successful delivery of the Project in line with all IFA and WVB shared goals requires an effective working partnership. The foundations of our collaborative "One Team, One Project, One Community" approach include:

- Clear governance structure and procedures to support timely, informed decision making.
- Building trust and maintaining open and honest two-way internal communications.
- External communications to ensure local stakeholder and community engagement and support.

#### 4.5.1.b.: Secision-Making Process

All partners commit to resolve internal disputes according to the terms of the respective agreements. For key decisions each partner has a vote equal to their share in the partnership. WVB's aim is for consensus decision making. Where this cannot be achieved, issues are elevated to the senior officer of each party involved. WVB's priority in the event of a dispute is for the Project to continue as planned.

David Sikorski, Project Manager, implements strategy, leads delivery, sets objectives, and makes key decisions for all aspects of project delivery. Where matters need escalation, he seeks support and authority from the SPV Steering Committee. This committee includes representatives from Walsh Investors, VINCI Concessions, and Bilfinger Berger, and has the authority to make the best decisions for the Project as a whole.

Brian Hoppel, Construction Manager, is responsible for decision making for the Project design and construction. In the same manner as David, Brian escalates issues to the Walsh-VINCI CJV Executive Committee, which includes representatives from Walsh Construction and VINCI CGP.

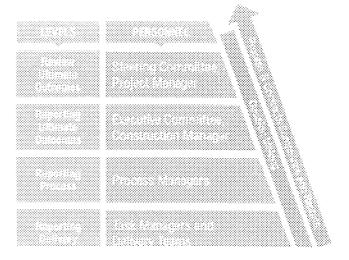
WVB managers at every level are aware of their autonomy to make decisions. Decisions are made and issues are resolved quickly at the lowest possible level where implications of the issue are best recognized. Only if these concerns cannot be resolved are they escalated to the next level. This ensures issues are

addressed correctly and quickly, minimizing the risk of adverse impacts on cost, schedule and quality. We use a formal, Project-specific issue escalation process based on a matrix of the potential impacts that could occur across disciplines including safety, cost and schedule. This matrix clarifies the exact escalation and reporting mechanism.

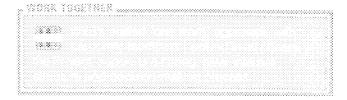
The decision making and internal communications hierarchy is illustrated in Figure 4.1-8.

## FIGURE 4.1-8 DECISION MAKING AND INTERNAL COMMUNICATIONS HIERARCHY

Decisions are matin at the fewest possible feet and escalated only when concents careful be resolved.



WVB has organized our structure to minimize disputes and associated impacts. WVB corporate partners are involved in all facets of design, construction and O&M, so that the interests of the Walsh-VINCI CJV align with the SPV. This vertical integration encourages the Walsh-VINCI CJV, including Executive Committee, and SPV, including Steering Committee, to make decisions based on the best interests of the entire Project. Our vertical integration thereby promotes our unified "One Team, One Project, One Community" approach to decision making.



#### 4.1.1.b.ii Internal Communication

WVB uses multiple formal and informal communication channels to provide clear, concise, and comprehensive communications, to maximize collaboration and trust in the Project team.

provide project controls, support effective communication, and facilitate decision making. Because of the integration of WVB's team, the SPV, Walsh-VINCI CJV, and WVB O&M Teams are a part of all meetings and internal communications.

and data are stored electronically and shared via a common document management platform called DyMaDoc. Access to this in-house application is provided to all authorized members of the team and supply chain. In accordance with our IMS structure, DyMaDoc provides a centralized information source for accurate communication between parties (Figure 4.1-9).

REPORTERS At all levels of WVB's organization each individual has defined reporting responsibilities that are clearly communicated to the team and documented on the organizational chart. Report templates are agreed

#### FIGURE 4.1-9 DYMADOC SUCCESS

WVB american VEKSI CBP has used TryMalboc stackership on 80 projects, including SKPP1 Memikray Tannas



apon with IFA to provide pertinent information in a form that facilitates interpretation of results. To support continuous improvement, senior managers use progress reports and key performance indicators (KPIs) consolidated by the Quality Management team,

maintains continuous two-way communication with the workforce and subcontractors through one-on-one communication, meetings, written reports, posters, and suggestion boxes. Managers at all levels have an "open door" policy to encourage communication. We hold daily and weekly task force, safety, schedule, and progress meetings to provide regularly scheduled opportunities for two-way communication.

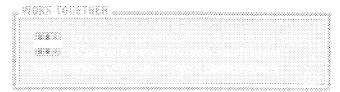
TABLE 4.1-4 PROPOSED MEETINGS

	A contract of		CONTRACTOR
Team/Workforce Briefings	Management staff/workforce	Requirements of works ahead; particular safety procesutions; progress/performance review	Daily (separate)
Toelbox/ Brownbag Talks	Täsk managers, workforce, major subcontractors	Focus on particular project issues, such as safety, sustainability, environmental, quality, etc.	Weekly/as needed (separate)
Schedule Review	Field engineers and superintendents	Project progress and performance against the schedule	Every two weeks
Section Progress Review	Section delivery teams; major subcontractors	Monitor progress of a particular section against schedule and targets; address or escalate issues; three week schedule reviews	Weekly
Specialist Team Meetings	Teams of relevant WVB and supply chain personnel	Monitor progress and make key decisions in specific areas including: design, engineering, quality, logistics, scheduling, safety and sustainability	Monthly
CJV Executive Committee Meetings	Representatives from each Walsh-Vinci CJV partner	Direct, manage and sepervise design-build works at a strategic level. Monitor progress and risk analysis to agree on actions to resolve issues and improve performance.	Monthly
Progress Review	Project Manager, Senior Managers, and SPV	Monitor overall progress versus schedule, project objectives and targets; address/escalate any issues as necessary	Every two weeks
SPV Steering Committee Meetings	Representatives from each of the WV8 partners	Direct, manage, and supervise the business at a strategic level, covering design-build, finance and O&M.	At least every two months

#### Alfilblii External Communication

WVB maintains transparency through ongoing communication with all external partners during every Project stage. Shortly after Project award, WVB sponsors a Project partnering meeting to establish lines of communication, goals, and meeting schedules as appropriate for stakeholder groups. WVB continues this partnering collaboration throughout Project execution with quarterly functions. To clarify communication with external parties, WVB establishes single points of contact for each key interface, as described in Table 4.1-5. David Sikorski, Project Manager, is the single point of contact for IFA.

Through experience on recent Indiana and Kentucky projects, WVB's local team members Walsh Construction, Jacobs Engineering, American



Structurepoint, Guthrie/Mayes, and Third Rock Consulting have established relationships with many shareholders and agencies. These initial relationships improve coordination as many of the protocols and practices are known and understood.

For efficient Project delivery, WVB co-locates with IFA in Utica, Indiana. Executing a project of this size from a co-located office allows for daily face-to-face interaction between design, construction, and IFA personnel and improves communication, cooperation, and expedited decision-making.

TABLE 4.1-5 KEY RESPONSIBILITIES AND METHODS FOR COMMUNICATION

IFA	Project Manager, David Sikorski	WVB provides a written report on progress and performance at least every two months, and meetings with the IFA to gain feedback.
IFA consultants: INDOT/KYTC/Parsons	Construction Manager, Brian Hoppel	Consultants are included in relevant design review and workshops to ensure an over-the-shoulder and closely coordinated review process.
Applicable third parties	Public Information Coordinator, Dan Hartlage	Consultation activities, regular meetings, third-party contact details, and inform public of upcoming service disruption.
Utilities	Utilities Manager, Mark Hedrick	Identify and manage all interfaces and eliminate risk of impact on utilities Communication is particularly important where any services are relocated.
Community and stakeholder (aesthetic review)	Public Information Coordinator, Dan Hartlage	Consultation meetings and surveys are conducted to communicate design proposals and obtain stakeholder feedback and input into design development.
Transportation agencies	MOT Manages, Mark Fournier	WVB uses ongoing communication through informal contact and weekly meetings to mitigate impacts on the traveling public, and ensure safety.
Emergency services; e.g. police and fire departments	Safety Manager, Mike Lawler	Establish key points and methods of contact; develop and obtain approval for all project emergency plans. Monthly updates communicate potential risks.
Residents near the construction site	Public Information Coordinator, Dan Hartlage	Early consultation meetings to ensure potentially affected parties are identified and aware of the risks. Advanced warnings provided via the Project Website, local media and on site notice boards. A phone number and email address is provided to which queries, concerns or complaints can be addressed.
Environmental agencies	Gina Morris, Environmental Compliance Manager	Interface with environmental agencies to ensure all requirements, including testing and permanent approvals are met.

## 4.1.1.b.iv Public Information & Community Outreach Staff

As WVB's Public Information Coordinator (PIC), Dan Hartlage of public relations firm Guthrie/Mayes, develops and implements WVB's Public Involvement Plan (PIP). As WVB's single point of contact with IFA's PIP Manager, Dan supports IFA on all communication and public involvement issues.

Dan, and his supporting staff from Guthrie/Mayes, have more than 35 years of experience creating and implementing successful public relations programs for local and national businesses and associations. Supporting Dan in the public information effort are key management members of the WVB team who fully support and cooperate with Guthrie/Mayes to form WVB's Public Information (PI) Team. The PI Team interact with the community, attend events as requested, and communicate Project details and schedules. These key managers include:

- David Sikorski, Project Manager
- Brian Hoppel, Construction Manager
- Donald MacDonald, Aesthetics Manager
- Mark Fournier, MOT Manager
- Mike Lawler, Safety Manager
- Brenda Wolf, DBE/Diversity Coordinator

Guthrie/Mayes provides guidance to these personnel, who have extensive knowledge of the Project and have years of leadership and technical expertise.

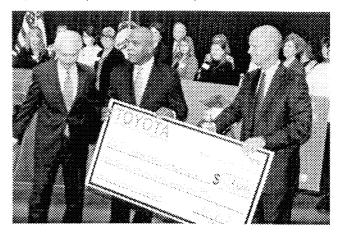


#### 4.1.1b.v Prefiminary Public Islamitton Plan

WVB's PIP supports IFA in their goal of proactive public information measures and prompt concern resolution to maintain public trust and integrity. All activities defined in the PIP support engagement and open dialogue amongst the Project team, IFA, and all sectors of the community.

#### EXPERT LOCAL PUBLIC RELATIONS

Dun Hartinge (right) joins Kennacky Governor Stave Servager (left) and Topata Mater Manadisstaring Hambacky president (Mindamed in a Chode processation at the Kimbacky State Caping). The Save Caping and Caping presentation was sequended and interferential by Oan and Control (May 20 Poste). Facilities short



To achieve the public involvement and communication goals for this high-profile Project, WVB works with IFA and the community to:

- Maximize positive public involvement throughout all phases of the Project through participation in general outreach, special focus committees, Project tours, and special events.
- Minimize inconvenience to the public through comprehensive, inclusive communication efforts that inform and prepare those directly affected by construction activities.
- Comply with consultation commitments in the First Amended MOA.
- Assist IFA in educating the public on the Project's importance to the region's mobility and economy.
- Provide the IFA PI Team high-quality support, including written and illustrative materials that are ready to publish.

WVB provides significant notifications to IFA's PIP Manager regarding lane closures, utility shutoff's, weekly construction update's, hazardous conditions, and traffic emergencies. WVB directs all requests for information received from the public to IFA and assist IFA in preparing the appropriate responses. The public involvement and communication efforts on this Project require an integrated, collaborative approach

with seamless interaction between IFA and WVB. As the guide for this combined IFA/WVB effort, WVB develops a Community Outreach Plan (COP) that identifies communication strategies and actions to deliver a consistent message in all public involvement, public outreach, and communication activities. The COP addresses the following:

- Roles and responsibilities
- \*\* Communication plan, procedures, and goals
- \* Public involvement and outreach approach
- \* Historic preservation outreach approach
- Significant public relations risks and benefits
- # Performance-monitoring processes and tools

The COP focuses on obtaining feedback from residents and ensure local participation in the design and construction process. Neighborhood organizations and historic preservation groups are consulted regularly to provide expertise on locally sensitive areas. Donald MacDonald, Aesthetic Manager, collaborates with these groups to ensure their concerns are heard.

It is WVB's intent to share the Project's success with the community. To do so, WVB anticipates and plans around the many local events that take place in and around the greater Louisville area throughout the year. Mark Fournier, MOT Manager, and Mark Hedrick, Utility Manager prioritizes minimizing impacts to the event holders, attendees, and surrounding businesses

#### WVB COMMUNITY EVENTS

WW8 plans to fudd communely events similar to the accepton event Wateh Codstruction and order to opening the i-305 Occ Plaints, River Bridge





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and residents with thorough traffic staging plans and advance notifications.

Mike Lawler, Safety Manager, serves as the fiaison between the Project Team and emergency services. Mike has developed a preliminary Project Safety Plan with input from Dan and Mark to ensure compatibility with public relations and traffic management. The Safety Plan is finalized through coordination with local fire and police departments to establish lines of communication for emergency response management. A crisis communications plan is established to ensure immediate stakeholder notification in the event of an on-site/project crisis or the development of a significant community issue.

WVB provides comprehensive and useful design and construction information using a variety of communication tools to reach the widest-possible audience. As needed by IFA, WVB writes content, provides graphics (as applicable), and helps facilitate the following:

- # Project website
- Social media
- Quarterly newsletters
- Direct mailings
- Collateral materials
- Advertising
- Press releases
- Public postings
- Email and other correspondence

A Project website is established with a live-feed web cam for residents to stay up-to-date with construction progress.

#### 4.4.2 PRELIMINARY DRE PERFORMANCE PLAN

DBE management, as well as all other subcontract management, is controlled by Support Process S2 within our Project IMS, WVB's preliminary DBE Performance Plan is summarized in this section and explained in further detail in the Volume 2 Appendices.

#### A.E.Z.A ACHTEVING BBE GBALS

WVB is committed to exceeding the 9% Disadvantaged Business Enterprise (DBE) goal established for the Project with an anticipated 9.23% participation. We accomplish this through an aggressive approach that includes:

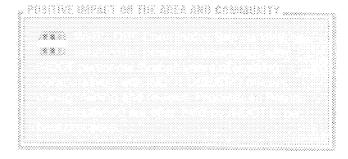
and delivered by Brenda Wolf, WVB's dedicated DBE/EEO Coordinator for the Project. Brenda has seven years of experience as Walsh Construction's Indiana Regional DBE/EEO Coordinator. Brenda has built positive relationships with INDOT, understands the INDOT DBE process, and has a history of supporting local projects to reach and exceed DBE goals. Brenda led DBE efforts on the 1-70 "Super 70" Design-Build which achieved 7.3 percent DBE participation, exceeding the 3.0 percent DBE goal. Brenda has supported other local projects including the Milton-Madison Bridge, Cannelton Hydroelectric Plant, and I-69 White River to CSX.

Brenda is supported by our experienced in-house DBE team, including Doug Cunningham and Marvin Jackson. This team has previously exceeded DBE goals on other projects, including:

#### **OUTREACH MEETINGS**

WVBs 0867620 Mininger, Sreeda Wolf, and Martine John-Sanchez, OHSC Naneger, greek potential and established 0866 at the WWS scenedars discuss transit hald of Members College





- W Dan Ryan Expressway Reconstruction Project: Achieved 28.7 percent DBE participation, exceeding the goal of 19 percent.
- Marquette Interchange Project: Achieved 22 percent DBE participation, exceeding the goal of 12 percent.
- DART Green Line Expansion Project: Achieved 42 percent DBE participation, exceeding the goal of 39 percent.
- a. PREACTIVE OUTREACH AND COMMUNITY ENGAGEMENT: In addition to attracting, retaining, and assisting subcontractors and material suppliers already certified and prequalified, WVB's objective is to identify companies not currently certified or prequalified that have potential to perform work on this Project and on future projects.
- 3. SPECIALIZED BEE ATTENTION: WVB partners with community agencies and organizations to provide resources and assistance with items such as material purchasing, bonding, bid preparation, and insurance, among others. WVB also provides technical assistance and training to all DBEs and offers a mentor-protégé program to emerging DBE firms.
- subcontracting opportunities for construction and design, as well as opportunities for material supply. We have estimated DBE participation for the Project on the values of subcontracting packages intended for award to DBEs. Anticipated DBE participation is expressed as percentage of the total amount of the Project (design and construction). **Table 4.1-6** lists these anticipated procurements by scope package, interested DBEs, and potential percentage, showing our anticipated participation of 9.23 percent.

	Constant of the						Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Contro	
kggregalé Haul	Messier & Associates	6.197%	Fuel and Petroleum	Big Meadow Oil, Inc.	2 .2.		Cherokee Construction and Excavation, ELC	
Bearing	King's Trucking & Excavation	0.01%	Supplier	Janobi Oil Sarvines	6.01%	Streeteral Removal	UINCO, Inc	0.01%
	Oferoles Construction and Excevation, LLC		Clerièra: Conditions	Mercetta Construction	0.00%	and Demelition	1.1. Brown Construction	*******
	Free Contracting, Inc.						RCL, Inc.	
	Jones and Bourland, Inc.			NVK Construction Inc.		Structural Steel -	Choice Construction	6.70107
Bridge Builders	NWK Construction Inc.	-0.01%		Confractors Corporation		Furnish and Install	Amelie Construction & Supply, ELC  Javier Steel Corporation; Louisville	0.01%
	PETMICIJ Construction Company, Inc.		Guardrati,	C-Tech Corporation			Attantic Painting	
	Vic Enterprises		Attenuators,	Datas Dean, Inc.	0.16%	Structional Steet - Painting and	Central Painting	0.01%
	Pioneer Associates, Inc.		Feace, Signals	JAG, Inc.		Coating	Antoine Adams Painting, Inc.	
	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s			CES Industries			Burt & Provest, line	
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tatwork - Aisceltaneous	DC Concrete, LLC	0.04%	Highway Lighting	Sansal Construction Inc.		Survey	Jacotsi, Joumbs and Lanz	0.01%
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	United Construction & Design Group	Week, 14		Cartar Valley		Masonry Coating	Eaton Construction Co., Inc.	
	Vick Strategic		Lundscaping	Earth Images	.0.31%		Advanced Ready Mix AR Concrete & Supplies, ELC	
	Cizm Islami Anchaenlögy			Environmental Landscape		Ready-Mix Concrete	American Ready Mix	2.89%
	K&S Engineers			NWK Construction Inc.			Bancroft Group	
Jesign	Khaira Enginsering						K.V.W.V. Traffic Control Holdings, Inc.	
onsultants	Rangsswamy & Associates	6.04%	Precast Brains -	Choice Construction		Traffic Mointenance	M.A.S. Markers, Inc.	0.01%
	Shrewsberry & Associates		Fornish/Indiali	Javier Steel Corporation	0.53%		S&T Partners, LLC dityla Traffic Control Services	
	Shird Rock Consultants			Amelie Construction & Supply, LLC			N&B Contracting	
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ectrical	I.E.W. Efectric Company	1.01%		· · · · · · · · · · · · · · · · · · ·		*	Catts Trucking	
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enstruction	Cuntral Engineering & Construction Assoc.		Furnish and Install	Javier Steel Corporation	Services in			

8. ABBUILD OBE PARTICIPATION FROM MAJOR SUBCONTRAC-TUBER: WVB requires, and assists, any subcontractor awarded work on the Project to meet the DBE goal for their individual scope of work whenever it is reasonably achievable.

6. PROBLESS REPRESSION WVB provides monthly DBE status reports to IFA and the WVB Steering Committee. This report summarizes recruitment strategies and results to show our ownership and accountability for DBE participation. Each month's report provides the details of current DBE participation, discussions of program status and progress, and outline future strategies to achieve or exceed our stated goals.

7. 886 CAPACHY ABBLUSA PROBASE WVB shares IFA's commitment to building a long-term legacy of expanded capability for local firms. WVB's mentor-protege program and other training opportunities help build capacity and provide for growth of local DBE business partners.

#### A.1.2.8 ERCOSRÁGISO DES PARTICIPATION

WVB's DBE Team initiated personal contact with DBEs early in the Project pursuit process. The initial meetings, beginning in early March, have progressed over the last seven months.

An important part of the WVB DBE Plan includes personal contact with local community organizations and agencies. From these contacts, we received information concerning local certified DBE firms, mentoring opportunities, and local DBE capacity. WVB has identified 2,033 DBE firms using published lists from

#### OUTREACH AT SIMMONS COLLEGE

The WVB DRE outcade at Samacox College hosted over 55 005, companies and 95 mandads.



WV 88 East End Partners . Size . Size.

INDOT and KYTC, and the database resources of the following agencies and local organizations:

- Louisville Metro Human Relations Commission
- Women Business Center of Kentucky
- Ohio River Valley Women's Business Council
- \* Louisville Hispanic/Latino Coalition
- Lexington Minority & Women Contractor Training Program
- \* Kentucky Minority Business Council
- National Association of Women Business Owners (NAWBO)
- W Kentucky Procurement Assistance Program
- \*\* Tri-State Minority Diversity Supply Coalition
- Minority Enterprise Development of Western Kentucky

WVB recognizes the agreement between INDOT and KYTC allowing for DBE certification reciprocity on the Ohio River Bridges Project. We take advantage of this Project-specific agreement allowing Kentucky DBEs to be counted as certified in Indiana for the Project, using it to provide additional opportunities for DBEs in the area.

#### 4.1.2.C OUTREACH AND ASSISTANCE FOR POTENTIAL DOE FIRMS

fied DBE firms, WVB's DBE team has focused on outreach to DBE firms that are not yet prequalified or who meet the criteria for a DBE firm, but is not yet certified. WVB hosted several community outreach events (Table 4.1-7) to identify such firms and to guide them to certification and prequalification through toolkits we created and distributed at the events.

TABLE 4.1-7 WVB-HOSTED OBE DUTREACH

03/13/12	Louisville, KY	WVB DBE Outreach Meeting held at the Muhammad Ali Center was attended by 35 DBEs
03/14/12	Jeffersonville, IN	WVB DBE Outreach Meeting held at the Sheraton Hotel was attended by 31 DBEs
08/06/12	Lousiville, KY	WVB DBE Outreach Meeting held at Simmons College was attended by 55 DBEs

WVB recognizes that this outreach effort requires multiple layers of support (e.g., community, faith-based, public school, chambers of commerce, etc.) to identify and assist these firms. Key support comes from Maurice Sweeney from United Construction and Design Group. Maurice is the Diversity and Inclusion Advisor for our DBE Team. Maurice brings with him an impressive résumé in community involvement and DBE participation in the Southern Indiana/ Greater Louisville Area, including as KYTC's Executive Director for the Office of Minority Affairs.

Additionally, the DBE team has met with DBE consultants from the Southern Indiana/Louisville area to assist with diversity and inclusion for the Project. Organizations met to date include the NAACP, Vick Strategic, Engaging Solutions, and Indiana Strategic Resource Group.

#### A.4.2.0 EXPANDING DOE FIRM CAPABILITIES

WVB meets the differing needs of DBE firms with a true sense of cooperation and partnership to elevate and expand technical, management and business capabilities of DBE firms through mentoring, training, and other specialized assistance.

Protégé Program is to cultivate an established DBE firm ready to grow to the next level, promote growth in the Southern Indiana/Louisville economy, and leave a positive benchmark on the community. As a seasoned mentor, WVB provides formalized mentoring that includes:

- Working together in monthly meetings
- Developing and implementing the protégé business plan to obtain the desired results
- 24 module classroom training provided by Mentor
- Providing guidance to allow these firms to be successful in the short and long term.

WVB has mentor-protègé commitments with the following DBE firms on this Project:

- C. Lee Construction Services, Griffith, IN Owner: Fréderick "Chip" Lee
- Messier & Associates Inc., Jeffersonville, IN Owners: Fernando and Juan Messier

WVB offers the following in-house training classes to DBE firms at no cost;

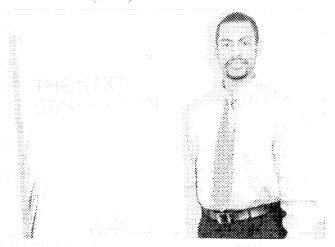
- Safety Training (e.g. OSHA 10-hour and 30-hour)
- Supérinténdent and Foréman Training
- Project Engineer Training
- « Crane Awareness
- Profit/Loss Statement Training

firms regarding contract compliance, goals and standards, cash flow management, and material purchasing. Specialized assistance also includes financial assistance:

- \*\* Insurance and Bonding: WVB provides assistance in overcoming limitations such as inability to obtain bonding or financing. This can be completed by simplifying the bonding process, reducing the requirements, eliminating the impact of surety costs from bids, and providing services to help DBEs and other small businesses obtain bonding and financing.
- Invoicing and Payment: DBE firms may face unique financial challenges affecting their ability to respond to projects of this size and complexity. WVB realizes these challenges exist and commits to expediting the payment process to DBEs.

#### PROTÉGÉ CHIP LEE OF C. LEE CONSTRUCTION

C. Lee Senstruction. Relinded by Indicence. Clear time is an extensional excessional demolition and translag compare travel in Ordina, Indiana. C. Lee Construction, Indianal or 2005, see been working with Watch Construction on visions projects in Northest training for according years. C. Lee in a cardified distance OBCMBE fairs selected by Watch Construction to paracipate in the Marten-Project Programs.



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## 4.1.3 PRELIMINARY WORKFORCE DIVERSITY & SMALL BUSINESS PERFORMANCE PLAN

A diverse, well-trained workforce is crucial to project success—both to improve delivery and support achievement of IFA and WVB sustainable development goals. With the commitment of its leadership and management, WVB plans to exceed Project targets of 15 percent minority and 10 percent female workforce. We have described our approach to achieve this commitment in our Preliminary Workforce Diversity and Small Business Performance Plan, attached in the Volume 2 Appendices.

Brenda Wolf, DBE/EEO Coordinator, is responsible for plan delivery. Related management procedures are implemented under Support Processes S1 and S2 in the IMS.

Brenda is supported by our experienced WVB Workforce Team which includes Doug Cunningham. Doug led the workforce team on Walsh's award-winning Dan Ryan Expressway project.



#### 8.1.3.4 DE-TEC-JOB ERA(NESS PROGRAM

WVB is committed to participating in INDOT's Equal Employment Opportunity Trainee Program and Onthe-Job Training (OJT) program and meeting its requirements throughout the Project.

Walsh Construction, lead contractor of the WalshWill CJV, is very familiar with INDOT's requirements from involvement in federal aid contracts.
Walsh Construction is currently signatory to the 2012
OJT Training Program and Partnership Agreement and have 11 trainees enrolled in approved training programs on four INDOT projects.

WVB's DBE and workforce team has already begun to consider OJT requirements for this Project and addresses these through the following avenues: Walsh Construction's existing, time-tested internship/co-op program, WVB delivers a successful Project white-collar OJT program, including a minimum of ten minority and female interns and trainees. WVB has targeted these educational facilities for participation:

- Iroquois High School
- Fairdale High School
- University of Kentucky
- Winiversity of Western Kentucky
- University of Louisville
- Ball State University
- Rose Hulman Institute of Technology
- \* Purdue University

Jacobs Engineering, and its subconsultants employ a minimum of four design trainees. These trainees gain experience in a number design functions including bridge and highway design, CAD drawing, and shop drawing reviews.

For design and construction, WVB and our subcontractors employ 14 professional trainees, for a minimum of 800 hours per trainee.

#### WORKFORCE DIVERSITY AWARD

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work with local labor unions to recruit trade trainees and apprentices. The WVB Workforce Team recruits through public and private channels likely to yield minority and women trainees. We focus efforts on recruiting trainees from the local area and encourage our supply chain partners to do so as well. The primary objective of the OJT Program is to bring minorities, women, and disadvantaged persons from apprentice status to a fully-experienced employee.

WVB estimates that trades OJT begins at the start of construction in 2013 and continues throughout the Project. The total number of trade trainees to be employed by WVB and subcontractors is estimated to be no less than 65 (Table 4.1-8). The number of trainees per work classification is based on contractor/subcontractor needs. The Walsh-VINCI CJV retains the primary responsibility for meeting training requirements. Training provisions are included in all applicable subcontracts.

WVB has already contacted local unions to discuss OJT needs. On August 8, 2012, the Workforce Team met Joe Wise of the Construction Trades Council, and Tim Murphy, Job Placement Direction for the Construction Pipeline, to agree on a plan to increase the number of individuals entering construction trades training programs in anticipation of the Ohio River Bridge projects.

Graduates from the Louisville Urban League's Pre-Apprentice Program and the Construction Pipeline are offered "fast-tracking" through union-sponsored boot camps to prepare them for formal entry into the established trade union apprentice programs. WVB furnishes workforce requirements to aid in the timely scheduling of these programs. During construction, apprentices then attend pre-established offsite training in addition to the Project OJT. As part of OJT, they attend training sessions away from their normal duties (usually for one week).

#### ALALBIB BOUGGOINS & TRAINING EMPLOYEES

WVB's commitment to invest in and train the individuals working on the Project both improves performance on this Project and strengthens the Southern Indiana/ Louisville workforce.

WVB assesses all recruits and uses the results of this assessment to identify educational and training needs.

TABLE 4.1-8 TRADES TRAINING PROGRAMS

1000	
Pile Division	-
Pile Orivers	5
Iron Workers	10
Carpenters	13
Operating Engineers	12
Laborers	25
1000	

This training is both induction training and ongoing training as further outlined in Section 4.1.3.G below. Environmental issues and site-specific issues are covered through this training.

#### a.1.3.0 Engéskaging Participation

WVB's approach to encouraging participation in the Workforce Diversity and Small Business Performance Plan begins with an understanding of the area demographics and existing collaborations with local community organizations to identify interested minority and female applicants.

As included in the preliminary Workforce Plan in the Volume 2 Appendices, WVB has participated in local career/resource events and met with 13 community-based organizations.

WVB's intent is to capitalize on established community organization programs as a source of local qualified applicants for the union apprentice and OJT programs. We met with the Louisville Urban League and discussed the benefits of its Kentuckiana Works Construction Pipeline Pre-Apprenticeship Training Program. WVB has discussed similar plans with others:

- Kentuckiana Power of Work Program (Elvin Stampley)
- Lexington Minority & Women Contractor Training Program (Marilyn Clark)
- \*\* Hispanic/Latino Coalition (Emily Dver)
- Canaan Community Development Corporation (Terra Leavell)
- Women's Business Center of Kentucky (Sharron Johnson)

Working directly with local organizations with established training programs is an important first step to building participation. WVB proactively set the job readiness plan into action: WVB team member, Walsh Construction, has employed a recent Construction Pipeline Training Program graduate, Nacee Sarver. Nacee is a laborer on Walsh's Milton-Madison Bridge project. His employment stands as a testimonial to the success of this local job-readiness training program (Figure 4.1-10).

#### ALTISLE COALS & MENTERING APPROACH

Principle goals of the Project mentoring program are to:

- Support small businesses in delivering an exceptional end product for IFA.
- Equip small businesses with skills and experience to their capacity to undertake larger projects in the future.

WVB's mentorship program covers both small, minority-owned, and female-owned companies and minority and female employees. At a company level, support is primarily conducted through educational workshops, training events, and meetings where participants learn new skills and build on existing knowledge. Further details are in **Table 4.1-9**. Participants are assigned a mentor to answer questions and provide support as they work on the Project.

TABLE 4.1-9 MENTORING AND TRAINING WORKSHOPS

Kickoff Meeting (within first 90 days)	Identify a broad range of goals, objectives and strategies.
Training and Mentoring (held quarterly)	Content includes project management, financial management, marketing, estimating, risk management, scheduling, billing, safety, sustainability and quality control.
Networking Meeting (held quarterly)	Attended by WVB personnel and menties to provide opportunities for them to improve networking skills
Wrap-Up Meeting (held at Project conclusion)	To review performance and progress and discuss future steps

#### 

WV6 has presentedly sat the Job Readings of the so policy shrough for contribe Urban Lougher's Construction Playley-balloning Program Gratienia Notice Survey is new testing on Versit Construction's Milion-Madison Borney program.



#### 4.1.3.6 METHODOLOGY FOR DIVIDING WORK

In dividing the work required to deliver the Project into procurement packages, Brenda Wolf has worked with WVB's procurement team to ensure opportunities for smaller businesses and female- and minority-owned firms. An outline of the packages we intend to procure is provided in **Table 4.1-6** in Section 4.1.2. Where feasible, we break these down further into smaller packages for individual sections of the Project to give DBEs or SBEs the ability to compete when bidding for these packages. Examples of potential packages include:

- Landscaping Section 4 only
- Bridge Builders Wolf Pen Branch Road only
- Precast Beams furnish/install
- Trucking Section 4 only

#### 4.4.3.F EVALUATING PLAN EFFECTIVENESS

WVB reviews the results of our Workforce Diversity and Small Business Performance Plan throughout the Project to ensure we exceed our targets. By measuring performance regularly and reporting to IFA, using upto-date utilization statistics, we can make adjustments needed to ensure satisfaction of WVB and IFA goals.

The Plan identifies key performance indicators, including:

- Number of minority and female recruits/trainees/ apprentices as a percentage of the total
- Number of training hours provided as a percentage of hours worked

Bedanise 2 E. C. S. Pilaisianapay Palucani biasang mesanjuh sa

WVB measures success in attaining OJT goals by reviewing:

- All trainee introduction and completion forms
- Monthly trainee reports
- Monthly total workforce reports
- Quarterly trainee evaluations
- Annual reports
- Monthly subcontractor reports including Federal EEO compliance

#### 4,1.3.6 TRAINING PROGRAMS

supply chain members complete induction training before commencing work. This covers the Project purpose, scope and objectives; basic safety and environmental risks and requirements; "Right First Time' quality; and site-specific issues.

well as more general training for all team members is provided. This training includes: supervisor training, technical training, environmental, safety and quality training, human resources training, project management training, insurance, and legal training.

#### 4.4.3.8 BUSINESTY CRITERIA

WVB follows all INDOT and KYTC EEO and SBE eligibility requirements for training program participants. We target minority and females for participation.

Union member personnel are eligible to participate through training programs provided by their trade union. WVB sponsors entry to the appropriate union for personnel when necessary.

#### A.S.S. CRAINING & MENCORING WORKSHOPE

Ongoing technical training supports individual professional development and keeps skills and qualifications up-to-date. Workshops to provide training and mentoring support in civil engineering, surveying and maintenance of traffic are targeted as potential topics.

Workshops provide support for specific audiences, allowing WVB to address questions and concerns. We have identified two DBE firms for individual mentorship: C. Lee Construction and Messier & Associates. Each firm is presently DBE certified and performing general construction activities and trucking.

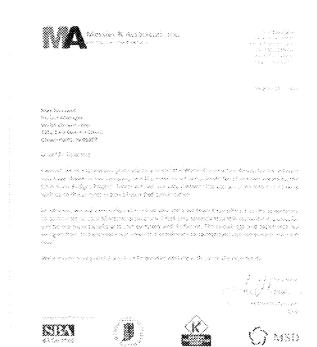
Another aim is to assist companies with the development of short- and long-term business plans, identifying potential growth areas, and providing training and support. For the short term, we concentrate mentoring for individuals on topics that enable them to improve their firms' prequalification limits or work classifications. Longer-term, we mentor individuals from qualifying small businesses to help their firms become DBE certified and INDOT prequalified. Many firms that would benefit from this support have been identified at WVB DBE outreach events. Workshop subjects include:

- Equipment
- \* Insurance
- # Human Resources
- Project Management
- Bonding and Insurance
- Safety

WVB maintains a schedule of workshops to be held and records attendance at each to monitor participation. Through involvement in this Project and training they receive, these firms grow and build financial strength and confidence to perform on larger projects.

#### MESSIER LETTER TO WYD

The addition, we are extremely arched that you and gour tance two offered no line exportability to perhapped in your Mentosphys programs? - Perhands Mesself, 2000



# Preliminary Project Baseline Schedule for Design and Construction

WVB is committed to reaching Project substantial completion by October 31, 2016. This commitment is driven by:

- Our past portfolio of successful projects, coupled with the scheduling plan we have in place, provides assurance the construction is safely completed eight months ahead of IFA's requirement.
- Increased investor confidence that results from a shorter construction schedule, as reflected in the negotiated financing rates, offer better value for IFA.
- Opportunity for IFA to generate toll revenue eight months earlier than anticipated.

the preliminary PMP including IMS and Key Personnel and Task Managers during preliminary design. This allows WVB to hit the ground running upon commercial close and award of NTP 1. Key to WVB's efforts to coordinate the Project startup is issuing subcontracts, purchase orders, and utility agreements; performing field geotechnical analysis; and distributing updated designs to the key Project stakeholders.

WVB has gone through an iterative process to develop a list of proposed design units specifically created to expedite early construction activities. Critical design units identified:

- Section 4 Erosion and Sediment Control and Stormwater Pollution Prevention Plan
- **Tunnel South Portal**
- Section 5 Tower Foundations
- Section 4 Phase 1A MOT
- Ramp A Bridge and Roadway
- North River Road Drainage
- Harrods Creek Bridge Foundation

WVB is ready for close engagement with IFA, local stakeholders, emergency services, environmental agencies, and the general public to get the feedback required to generate and approve these early design units.

cal path. WVB's early design efforts to reduce the Tunnel length and optimize section properties supports our commitment to achieve substantial completion by October 31, 2016. The early design units for the Erosion and Sediment Control and the Tunnel South Portal are critical design activities to starting Tunnel excavation. Main span bridge work is near-critical and WVB's proposed early design units are planned to expedite foundation construction by fall of 2013.

SETTING MALESTERMS: The milestones outlined in Table 4.1-10 are those listed in Exhibit 4 of the PPA. These dates are included as milestone activities in the Preliminary Project Baseline Schedule and reflect the logic and durations carefully developed throughout the proposal and bid process.

Roadway Sections 4 up to US 42 and Section 6 up to Salem Road is available for opening at the milestone dates of July 21, 2016, and October 5, 2015, respectively. Opening areas of the Project a combined 31 months ahead of IFA's substantial completion requirement increases public access to Salem Road and reduces traffic impacts, therefore enhancing public perception.

**Table 4.1-11** is a summary schedule indicating the milestones and WVB's overall approach to scheduling the Project. Further details of our approach, including O&M details, are provided within Section 4.2.2.2 and 4.3.2.2 along with the schedule narrative and full preliminary P6 schedule provided in the Volume 2 Appendices.

TABLE 4.1-10 WVB'S TARGET MILESTONE DATES

	3032000000	
1	- Complete Main Span Pier Foundations	8/8/14
2	Complete Tunnel Excavation & Initial Liner	7/10/15
3	Complete Main Span Towers	10/9/15
4	Complete Western Limits of Section 6 Roadway	19/5/15
5	Complete Eastern Limits of Section 4 Roadway	7/21/16
6	Complete Final Tunnel Liner	5/9/16
7	Complete Main Span Superstructure Erection	8/13/16
8	Substantial Completion	10/31/16

rese Submission and Review ord of RTP 1 mod Chish menterist to Start Design memerist to Start Design memerist for NEP 2 memerist for Construction Substantial Completion (October 31, 2016) substantial Completion	NTP 1 Financial Close 4/1/2013  ign NTP 2  Start Construction	aasta een 1800 een 1800 eesta 1801 1801 1801 1801 1801 1801 1801 180	** WVB Substantial Completion  ** Open to Traffic 10/31/2016
Construction Start-Up REC Package Displacing Traces Readway and Retaining Walls Bridges Trend Todowated and total Ciner Funnel Readway Start and Funal Liver Tamed Aesthetics and Retaining Walls Bridges Bridges Bridges Bridges Bridges		Completed 7/10/2615	Completed 5/9/2016 000 000 000 000 000 000 000 000 000
Foundation: Ward Fund Fost Program Productions Loss Test Program Foster Compensate Superstructure and Erection Sequence Main Span Port Foundations Lead Concrete Toward Erect Main Start Superstructure Actitate Elements and Foster Superstructure Approach Start Foundations Approach Start Foundations Approach Start Foundations Approach Span Reductions		Completed 8/8/2014 Completed 16/9/201	96 Higgs
Boudway and Polariting Wolfs Bridges Nationaly and Botamery Warts Bridges		Open to Traffic 1	0/5/2015
hlights to Getting Started	×		
P 1 12/20/2012	Start Design 1/19/2013	NTP 2 5.65/2013	(*) Start Construction (v3/2013
inbmit DBE Performance Pian vith Executive Agreement Johnn Worxforce Diversity and SBE Jerformance Pian with Executive Agreement	Approvs DBE Performance Plan     Approve Preject Management Plan (A)     Host Design Workshop	Reacti Financial Close     Bubmil Payment Bond and Performance Security     Bistablish Project Office	Approve Project Management Plan (8)     Host MOT Meeting     Submit Temporary Traffic Control Plan
lubral Insurance Policies	Identify Design Units     Conduct Environmental Comphence	<ul> <li>Heat Utility Owner Meetings</li> <li>Approve Project Baseling Schedule</li> <li>Approve WD and SSE Performance Plain</li> </ul>	Approve Access and Mobility Plan     Approve Environmental/Stormwater     Foliation Prevention Plans
	and Mitigation Training  Approved Design Review Flantand Schedule	representation constitution in the constitution of the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitution in the constitutio	2 9 10 10 10 10 10 10 10 10 10 10 10 10 10

#### 4.1.5 OUALITY MANAGEMENT

WVB's quality program is based on the premise that quality for all design and construction activities is best achieved by those responsible for performing the work, including subconsultants and subcontractors, and starts before design or construction begins. All WVB personnel participate in and contribute to the commitment to "Right First Time" delivery and are guided by implementation of the quality management process. The documented Quality Management Plan (QMP) provides guidance to the design professionals, workforce, project management, and quality assurance/quality control personnel in designing, planning, constructing, confirming, verifying through comprehensive inspection and test plans, and documenting project outcomes.

Quality management, as one of the key processes within WVB's IMS (Control Process C2), is the responsibility of Quality Manager, Martine Julia-Sanchez. The IMS includes all phases of this Project; WVB maintains a consistent approach to quality management throughout the Project lifecycle, from design and construction through the Operating Period.

The QMP is endorsed by WVB Steering Committee and is promoted throughout the WVB organization. The QMP and the entire Quality effort are continuously improved through comprehensive management audits that include input from IFA and stakeholders. Performance is measured against defined goals and related objectives. In **Table 4.1-12**, WVB's approach to elements of the quality management process is described.



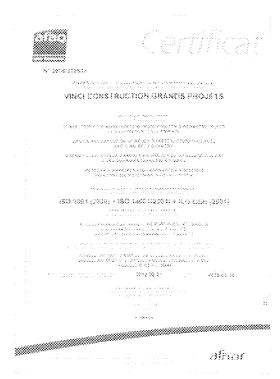


TABLE 4.1-12 IMS PROCESS C2 - QUALITY MANAGEMENT

Key Performance Indicators (KPIs)	Performance benchmarked, measured and monitored using Project-specific KPIs. Use leading indicators to assess current situation and plan ahead. Use lagging indicators to monitor progress for continuous improvement.
Major Events	Empower team members to decide at a local level. Exception reporting to ensure team members recognize issues that must be escalated for swift resolution. Develop root cause analysis to ensure effective corrective/preventive actions.
IFA Feedback	Establish clear procedures and responsibilities within learn to seek, address and respond to IFA feedback.  Conduct regular surveys to collect feedback on schedule/plan information.
Employee Feedback	Define processes that enable formal and informal communication with employees. Perform regular employee surveys.
Process Reviews	Establish a structured approach to ensure that each process in the IMS has regular reviews for effectiveness, relevance and currency for the process owner.
Management Review	Capture and analyze all available data to ensure IMS remains relevant and effective (e.g. audit results; IFA feedback; process performance). Identify improvement opportunities, resources, and training needs.
Improvement Plans	Incorporate outputs from the Management Review into improvement plans which identify the person responsible for implementing improvements and the schedule in which to achieve this.

See Section 4.2.3 for detailed approaches relating to the other C2 Quality Management processes.

RESPONSIONITIES FOR HELIVIERS BUT SHELTY MANAGEMENT

"I.8." The key responsibilities for the WVB quality management approach are shown in the approach summarized in Figure 4.1-12 and detailed in WVB's preliminary Project Management Plan in Volume 2 Appendices. The chart shows how, as part of our approach to "Right First Time" (RFT) delivery, we operate comprehensive inspection, testing and commissioning procedures during the design, construction and the Operating Period for both on- and off-site items.

WVB's inspection, test and commissioning procedures are incorporated into our IMS. Construction Quality Control Manager, John Reid, is responsible for the implementation of these procedures. John reports directly to Construction Quality Manager, Courtney Norris. WVB's organization includes an independent inspection team which is completely separate from production responsibility. All inspections are performed by qualified and experienced personnel under John's direction. To ensure WVB's quality management approach specific responsibilities are given to the key members of the quality team. Specific quality management responsibilities are shown in more detail in Figure 4.1-11.

As part of WVB's IMS, everyone on site has responsibility in the delivery of the QMP; all team members are qualified for their role and responsible for compliance of their tasks with requirements.

#### DUPLEX A86 HIGHWAY TUNNEL

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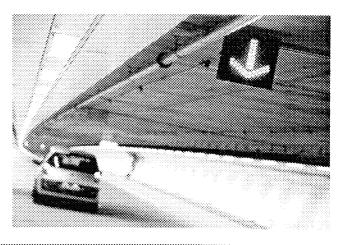


FIGURE 4.1-11 QUALITY MANAGEMENT APPROACH

Managament expressión with RFT delivery and IFA evenagias, expensed despis, provious la gertentagry FFTD la Valume 2 approximent

#### RFT in design by SOEP design production team and section managers. who are empowered to ensure RFT. IFA approved construction design. QC in design by Marcos Loizias, Lead Engineer, is supported by independent checks by Buckland & Taylor (bridge) and Jacobs (Tunnel). QA in design by Design Quality Assurance Manager, Bruce Peterson. audits and verifies design quality provisions are fulfilled. RFT in construction is responsibility of SQEP (workforce, foreman, Quality superintendents, and engineers) and will specifically review and prepare Assurance, IFA Quality Oversight Quality activity quality plans, inspection, and test plans. Right Surveillance Control, Construction Quality Control Manager, John Reid, and independent First Time & Auditing. inspection, Delivery inspection team, inspect the works, identify and manage non-conformance. and Sampling. Continuous and Testing Construction Quality Manager, Courtney Norris, and team audit the work Improvement for compliance and review NCRs and for continuous improvement. RFT during Q&M is responsibility of SQEP including patrollers and operators along with rehabilitation workers for RFT work. Quality control and quality assurance by Phil Malin, Deputy Project Manager, supported by independent inspection teams.

#### 4.1.6 COST CONTROL, SAFETY, ENVIRONMENT & RISK MANAGEMENT

Vertical integration and consistent application of WVB's Project IMS ensures the safe, sustainable delivery and operation of a quality Project.

#### alesa čusi comfrüt

WVB's project management approach implements proven cost controls that enable us to measure and report on performance against targets for key areas, maximizing visibility and predictability for IFA at every stage.

The comprehensive control and assurance procedures WVB has implemented, as well as our information technology (IT) systems for document and project controls, are incorporated within our IMS. These procedures and systems build on the best practice, proven project controls, and key performance indicators (KPIs) already in use by the WVB partners. The management systems used to control, review, and coordinate costs and schedule consistently during the design, construction, and O&M phases are:

- Document Control: All documentation is stored and controlled online in WVB's electronic Dynamic Management of Documents systems (DyMaDoc). See Section 4.1.7 for more detail.
- Cost: WVB's commercial organization has been designed to manage and control cost effectively, calculating Earned Value Analysis (EVA), Cost Performance Index (CPI), and Schedule Performance Index (SPI) data to support predictive trend analysis. Cost is managed at both the SPV and Walsh-VINCI CJV levels using current in-house systems, CMiC and Pegase systems.
- Schedule: Past production rates from local and global projects were input for each construction activity to schedule the Project. The resulting schedule, developed in Primavera P6, is based on a realistic assessment of outputs, resources, site access, and other Project constraints.

TIME AND BUDGET

Managers direct the scope, schedule, and budget for design work, monitor related design unit development, and report progress to Andrew Brennan, Design Manager. The Section Design Managers develop three-week look-ahead schedules and establish plans to accelerate the design schedule if needed. WVB's construction Section Project Managers are owners of their budgets and cost reports. These monthly cost reports compare actual costs to original estimates for each Project section. Scott Singleton, Scheduling Manager, oversees schedule management efforts including weekly reviews of man-hour based production, monthly Critical Path Method (CPM) schedule updates, and weekly updates to detailed three-week look-ahead schedules.

management system to define and monitor the schedule of routine inspection and maintenance. WVB has extensive experience in using a range of Computerized Maintenance Management Systems (CMMS) for this purpose.

system WVB has implemented is tailored to suit the specific Project requirements. For all stages of the Project, the project controls system serves as a single source of accurate information for the project partners, capturing and sharing accurate and meaningful data recorded against KPIs. This allows WVB to anticipate and resolve issues before they impact the Project, and enables continuous Project improvement by supporting the effective analysis of to-date performance in all areas.

#### ATS MOTORWAY

Yavis's MAS, DyMother and clost contest measures supresenceptify word on WVB detects a construction of many projects helicating the STA billion ATB Materway in France



- **Valuation** (#1.4.1.) Physiologisters (England International Village

#### ALLSUS SAFEYY

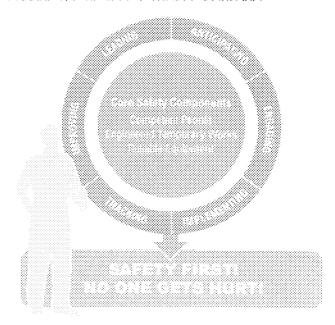
WVB's philosophy regarding safety is "No One Gets Hurt." We believe this can be achieved on the Project when all personnel are actively engaged in a safety culture. To achieve a safe environment, WVB implements a comprehensive Project Safety Plan, covered under IMS Process C4, developed to deliver the principles of our Safety Strategy (Figure 4.1-12).

WVB's core safety components include competent people, engineered temporary works, and reliable equipment and tools. WVB's Safety Strategy is reinforced by six areas of activity:

- Leading: Strong, proactive leadership by all managers and supervisors to instill a positive culture and safe behaviors.
- Anticipating: Designing out risks in all stages, using lessons learned from previous jobs, challenging existing practices and simplifying processes to ensure understanding.
- Engaging: Communicating risks and controls internally to our design, construction, and O&M teams. Communicating risks externally to third parties. Inviting feedback for improvement and to achieve team buy-in to WVB's safety approach.
- Implementing: Mike Lawler and his site safety team are responsible for the implementation of the Safety Plan including all training and on-site instruction. All WVB personnel are responsible to meet our goal that "No One Gets Hurt".
- Tracking: Proactive and systematic monitoring and reporting of WVB's actions and performance to control delivery and achieve continuous improvement.
- Improving: All identified potential improvements are captured in a Safety Management Action Plan, and monitored continuously by WVB's Safety Manager, Mike Lawler.

## SAFE AND EUSTAGRASIE

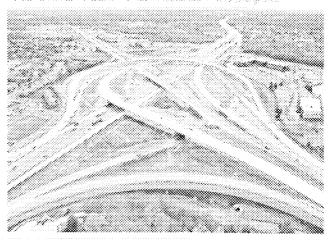
#### FIGURE 4.1-12 WV8'S SAFETY STRATEGY



WVB's project Safety Plan describes actions required in each of these key areas for each stage of project delivery, the related management processes, systems and controls and all reporting requirements. Related responsibilities are clearly assigned to team members. Training and on-site instruction overseen by safety professionals includes site inspection and toolbox talks to ensure all team members are aware of site rules, risks, safety measures and emergency procedures. Subcontractors and suppliers are included and expected to comply with the Safety Plan at all times.

#### NO ONE GETS HURT

WVD member Whish Considerations proven parent copies contributed to 660,000 man mount with no last time applicants to 70 proving of work on the Accelerate 1,200 property.



The Walsh-VINCI CJV uses a blue hard hat program, successfully used on the Milton-Madison Bridge and Cannelton Hydroelectric projects, to identify all new employees to ensure that they are being watched out for by the experienced personnel on the staff.

Specific safety risks and controls for particular activities, including working in the Tunnel, working near or over water, and road safety, are included in related method statements, and the teams involved in the work receive focused training. Specialized safety equipment and personal protective equipment are provided for particular tasks.

The safety of the traveling public is a key priority and WVB's Safety Plan establishes how WVB ensures the traveling public's safety through the use of advanced warning, appropriate signage and the use of safety barriers to create physical separation of personnel and equipment and the traveling public.

#### altiglo erverokmental makagement

WVB commits fully to achieving all of IFA's goals for the Project. This includes innovative and efficient design, construction and O&M solutions to minimize environmental impacts. The PMP ensures that all environmental requirements, permits and commitments are complied with, and provide evidence to demonstrate this. This includes the requirements of the 2012 Record of Decision (ROD), 2003 Final Environmental Impact Statement (FEIS) and 2012 Supplemental Final Environmental Impact Statement (SFEIS), and all other environmental approvals and laws. These procedures are defined in Control Process C3 in our IMS.

#### 4,1.8.c.: Environmental Compliance Manager and Environmental Years

WVB has selected Gina Morris with Third Rock Consultants as the Environmental Compliance Manager (ECM), Gina is the single point of contact for all environmental matters throughout the Project. Third Rock Consultants is a strong Kentucky-based environmental DBE consulting firm with prequalifications in both Indiana and Kentucky. Gina has over 35 years of experience in NEPA documentation, environmental assessment, permitting and mitigation.

Prior to joining Third Rock, Gina was Assistant Director of the KYTC Division of Environmental Analysis,



and is a Professional Wetland Specialist as well as Professional Geologist. For many years she was responsible for ensuring environmental compliance for all KYTC projects. While at KYTC, she reviewed and commented on all environmental base studies and the Draft and Final EIS for the Louisville-Southern Indiana Ohio River Bridges project. As a result, she has a thorough understanding of the specific environmental commitments for the Project. Supervisors throughout the WVB team support Gina with environmental management. Many of WVB's task managers have proven experience with environmental management, such as permit applications, crosion control, noise abatement, and vibration monitoring.

#### ENVIRORMENTAL MANAGEMENT

WVS's experience motories resonant waterle, such as this Pengrina Information (dilton-Madison featis).



4.1.6.c.ii Environmental Compliance Management Plan (ECMP) Companent Parts

Gina Morris, ECM, in collaboration with WVB's supervisors, oversees the completion of the ECMP and its submission for IFA approval in line with PPA requirements and in time for design work to begin.

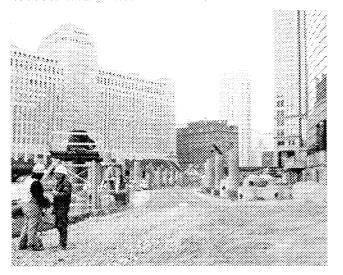
AND RESIDENCE WVB has reviewed the Project environmental commitments and has incorporated them throughout preliminary design. As decisions made at design stage influence sustainability in all later project stages, Gina works closely with Laurent Agostini, Design-Build Coordinator, and Pierre Morand, Site Manager, to ensure all commitments and related controls, mitigations and monitoring measures are integrated effectively into our designs and construction approach.

All commitments and requirements are recorded in a Project Environmental Commitment Matrix, with owners assigned for each item. This is used to track achievement of each commitment and requirement. An associated schedule is developed to ensure permits are obtained, commitments satisfied, and reports submitted on time to allow design and construction to progress as planned. Gina also inputs to the ongoing development of the overall Project schedule, identifying upcoming environmental activities that require WVR team member involvement.

availing and minimizes enumerated impacts. The WVB Environmental Team has worked with our design, construction, and O&M staff to develop a Project Environmental Risk and Opportunity Register to identify potential impacts, suitable mitigation measures, and

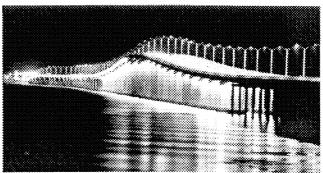
#### ROISE/VIBRATION ABATEMENT

Varion Construction's means and reathogs for the Warter Orive Reconstruction project in described Chicago fook line occurring the 57 high-rise buildings beginned to the project ster, requiring makes and plasting-vectation attaleneous plans.



#### ENVIRORMENTAL STEWARDSHIP

US 90 Bridge over Bay St. Leads technique environmental management amasters for construction enough sonside, marine revenuement and endangered spacess.



assign responsibility to appropriate team members. This includes potential impacts to woodlands, 4(f) resources, parks, historical properties, threatened or endangered species, and wetlands and waters of the United States.

Gina is directly involved in decisions in specific management plans and the approved Project environmental documents. She coordinates with Pierre Morand during activities adjacent to or within sensitive environmental resources to ensure appropriate environmental mitigation and control measures are implemented.

documentation, including applicable laws, regulations and industry best practice. This list is updated as necessary to ensure WVB remains compliant with the latest requirements. Environmental documentation is managed by our administrative team, according to IMS support process S7. It is made available to all team members online via our electronic document management system.

procedures for environmental communication and reporting. This includes our organizational structure and reporting lines as well as contacts with IFA, stakeholders, and other third party organizations.

Environmental training requirements are finalized in a Project Environmental Compliance and Mitigation Training Program appended to the ECMP and includes the following:

Design team training to ensure awareness of environmental requirements and constraints.

- Induction training to communicate key environmental concerns and controls.
- Brown bag talks to address specific issues in construction.
- Environmental progress and performance indicators communicated via progress review meetings and on-site posters.

WVB implements a reporting protocol describing the format for individual activities oversight reports and monthly environmental progress summaries. This information is used for progress reports required by the IFA and the end-of-Project documentation communicating steps taken to respond to changes during construction.

and unannounced site inspections to confirm the correct implementation of all environmental controls. Martine Julia-Sanchez, our Quality and HSE Manager, owner of Control Process C3 (Figure 4.1-13), and the Project quality controls and assurance team lead bi-annual audits of the IMS including the Environmental Management System. All monitoring, testing, inspection, and audit results are recorded in templates appended to the ECMP to provide consistency in reporting. Results are analyzed by Gina and her team

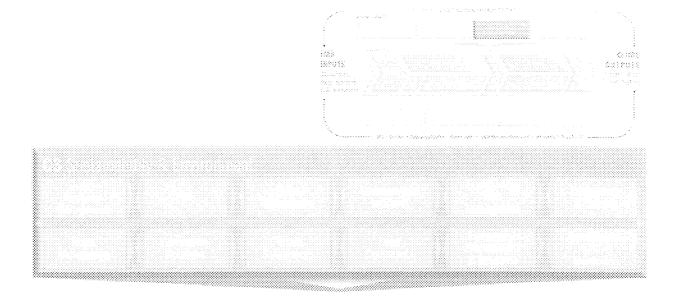
to enable trend analysis and the identification of any areas of non-compliance.

or audit activity reveals potential or actual non-compliance. Gina evaluates the extent of damage, assesses the root causes and engages those members of her team with the appropriate expertise to determine additional plans, actions or approvals required before work can proceed. A corrective action plan is prepared and submitted for IFA approval and implementation. This plan is then monitored for effectiveness and tracked to completion. An agreed upon matrix of potential issues and their solutions with IFA and any relevant third party is implemented to minimize schedule impacts.

## 4.1.8.c.iii letegrating Permits, Issaes, 6. Commitments lets OSM

The IMS and WVB's sustainability policy apply through all stages of Project delivery, including the Operating Period. Project Manager, David Sikorski, owns the sustainability policy during design and construction; it then becomes the responsibility of Vincent Meyer, O&M Manager, once the new facilities become operational. Our O&M Team is involved throughout the design development process to maximize their awareness of, and input into, all decisions made at this time, including environmental matters.

FIGURE 4.1-13 CONTROL PROCESS C3 IS OWNED BY THE QUALITY AND HSE MANAGER





WVB's Environmental Commitment Matrix and Environmental Risk and Opportunity Register are reviewed and updated throughout design and construction stages for a clear record to use in the Operating Period. Vincent reviews these documents in advance of construction substantial completion to ensure any permits required to allow the Operating Period to commence are obtained. He then continues to update the matrix and register to provide ongoing assurance of our environmental compliance during the Operating Period.

During the final punch list stage of construction, WVB coordinates the workshop with IFA/INDOT to confirm the sustainability principles to be implemented during the Operating Period.

4.1.6.c.iv Mitigating, Eliminating & Reducing Risk

WVB applies a structured risk management approach to identify all Project environmental risks, assess potential consequences and calculate likelihood. This allows us to identify and implement appropriate measures to either eliminate a risk, or reduce and mitigate potential impacts (Table 4.1-13).

To ensure WVB's proposal incorporates necessary mitigation measures, our team has already begun to identify potential environmental risks. This continues through the design development and construction stages to ensure the Project remains compliant with any changes to legal or corporate requirements. Throughout this process, the WVB O&M Team is involved to ensure

TABLE 4.1-13 PROJECT-SPECIFIC ENVIRONMENTAL MITIGATION MEASURES

	Particular de la companya de la companya de la companya de la companya de la companya de la companya de la comp
Contamination of ground or surface water, by pollulant spills/ dust/run-off. Sediment damage to water quality and aquatic hebitals.	All permanent roadway/structures in the WHPA designed so water is collected, filtered and disposed of at Harrods Creek. Hauf roads constructed with liners and drainage for run-off water in the WHPA. Construction vehicles not to access wetlands and floodplains. Silt fences constructed where needed.
Permanent loss of riverbed. Temporary loss of water quality.	Design uses a precast cofferdam tub footing, eliminating construction on the riverbed and removing this risk.
Non-compliance leading to e.g. damage to historical assets	Erect fencing and signage to demarcale restricted work zones. Cover restrictions in personnel training.
Permanent/temporary loss of vegetation	Develop designs to limit impacts and minimize footprint. Develop, implement and monitor project-specific Referentation Plan. Use restrictive fencing and signage to prevent access/ damage by construction vehicles.
Temporary or permanent loss of habitat/mobility. Noise/light/vibration disturbance – incl. in breeding/nesting season.	Provide wildlife crossings for use in construction and operation. Develop construction access routes to limit temporary crossings of habitats. Schedule construction around breeding/nesting seasons. Methodology to limit requirement for construction activities in water. Training and awareness.
Direct/indirect damage to/ destruction of archaeological or historic assets – identified and unidentified	Design works to avoid impacts, fence off areas identified to prevent access and damage. Develop, implement and monitor a project-specific Noise and Vibration Plan. Train operatives in related issues and controls. Monitor to ensure noise/vibration stays within agreed limits.
Distorbance of local residents. View disturbance. Wildlife disturbance	Construct temporary and permanent noise barriers; screening measures such as earth walls, noise walls, trees/shrubs and fencing.
Blocking of access to local properties, increased local congestion/noise/air pollution.	Implement design optimizations at Wolf Pen, Port Rd. SR 62, US 42 to limit staging limeline and off-site trucking. Route trucks onto major arteries. Brief drivers.
Increased waste disposal costs. Air, water and soil contamination. Safety risk.	Develop designs to limit potential for disturbance. Carry out ground surveys & develop Hazardous Materials Management. Plan to control in line with best practice.
	surface water, by pollutant spills/dust/run-off. Sediment damage to water quality and aquatic habitals.  Permanent loss of riverbed. Temporary loss of water quality.  Non-compliance leading to e.g. damage to historical assets.  Permanent/temporary loss of vegetation.  Temporary or permanent loss of habital/mobility. Noise/light/vibration disturbance – incl. in breeding/nesting season.  Direct/indirect damage to/destruction of archaeological or historic assets – identified and unidentified.  Disturbance of local residents. View disturbance.  Wildlife disturbance.  Blocking of access to local properties, increased local congestion/noise/air pollution. Increased waste disposal costs. Air, water and soil contamination.

potential impacts on the Operating Period made during design and construction are considered and addressed.

#### 4.1.6.c.y Compliance with the Environmental Management System

WVB uses the IMS to control project management through all stages of delivery. This system incorporates the best practice and proven management systems and controls in use throughout the WVB parent companies. It uses VINCI CGP's corporate ISO14001:2004-certified Environmental Management System (EMS) as a baseline.

It is the overall responsibility of ECM, Gina Morris, to ensure compliance with the EMS at all times. Gina attends all relevant design-stage meetings to ensure WVB Design Team is fully aware of EMS requirements and incorporates these into designs and construction methodologies. She leads environmental risk identification and mitigation activity, trains other team members in their associated responsibilities, and maintains all required records during delivery.

Regular audits to ensure compliance are carried out at all Project stages. Compliance with the WVB EMS is audited and confirmed annually. Audits continue throughout the Operating Period to ensure continued effectiveness and application of the EMS.

#### ENVIRORMENTAL & SUSTAINABILITY ACRIEVEMENT

Constructed by VINCLOGP under 180 nong/limics and maintained by VINCLOGCOCOLISES, Confederation Bridge year an Environmente: Achievement Award and Rational Canadian Gold Basset for Laurenche.

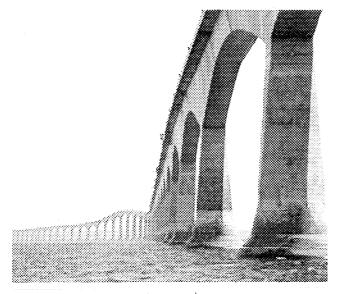
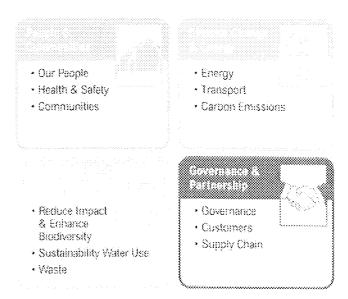


FIGURE 4.1-14 SUSTAINABLE DELIVERY



#### 4.1.6.c.vi Sustainability Management Plan

WVB's draft Sustainability Management Plan (SMP) is included in the Volume 2 Appendices. The SMP addresses each element of our sustainability strategy (Figure 4.1-14). It identifies Project-specific targets, key performance indicators, management procedures and responsibilities, as well as monitoring and reporting mechanisms. This ensures all aspects of sustainable development — environmental, economic and social — are considered throughout project delivery.

WVB's compliance with IFA/INDOT's requirements for a sustainable project throughout design, construction and operation:

- \* Is safe and secure
- Provides long term security
- \* Improves cross-river accessibility and mobility
- Optimizes life-cycle costs
- Provides économic opportunity
- Protects and conserves environmental resources
- Provides for proactive engagement with the public

The SMP is reviewed and updated at all monthly specialist sustainability team meetings to ensure it remains relevant, meets regulatory requirements and delivers IFA/INDOT expectations.

#### 4.1.6.0 RESK HANAGEMENT

WVB's risk management plan and risk register addresses each of IFA's concerns, including:

≈ 4.1.6.d.i	Identification of Risk
	Potential Consequences
	Probability of Identified Risks
# 4.1,6.d.iv	Risk Sensitivity Analysis
≈ 4.1.6.d.v	Risk Mitigation Strategies

The following plan summarizes WVB's six-step project risk management approach. We identify and assess the potential probability of consequences of all significant risks on the Project. This approach allows us to identify and implement appropriate measures to either eliminate a risk entirely or reduce and mitigate the potential impacts of the risk. Applying this approach during the proposal period has contributed to the development of the project risk register, an extract from which is shown in **Table 4.1-14**.

- 1. Risk Management Planning: Engages key stakeholders (including IFA, INDOT, engineering, construction and health/safety/quality/environmental (HSQE) operations) to collaborate to manage risk.
- 2. Risk Event Identification: Identifies potential risk events and, for each, the affected process area, category, action owner, potential effects if no action is taken, and potential cause of failure.
- 3. Qualitative Risk Analysis: Prioritizes risks by analyzing the probability of occurrence, categorized in five levels across a range of 0-100% certainty, and impacts, categorized in five levels to determine potential impact on schedule, cost and resource.
- 4. Quantitative Risk Analysis: Assigns a risk relating to the potential impact on overall Project objectives. This analysis serves to place risk events on a heat map according to the total quantitative risk calculated as (Risk Probability) x (Risk Severity).
- 5. Risk Response Strategy: Determines options and action plans to mitigate events and enhance opportunities. This begins with all red (high level) risk events, then continues to yellow (medium) and green (low) risk events. Further priority can be established according to the risk level number. WVB uses Monte Carlo sensitivity analysis to ensure we prioritize risks



correctly. Each risk is assigned an owner who is the most appropriate person to address that risk.

6. Risk Monitoring and Control: An ongoing process overseeing the effectiveness of risk responses, monitoring residual risks at a predetermined frequency, recording action status, identifying and documenting new risks and assuring risk management processes are followed. This process is monitored and controlled using the project risk register.

The risk register remains an evolving document throughout Project delivery to ensure WVB can adapt its delivery approach to changing conditions. Relevant parts of the register are discussed and updated at all project review meetings, with the most significant risks reviewed at monthly senior management team meetings.

#### RISK MANAGEMENT IN PPP

Wife partners one province's insensiming measures throughout all phases of disance design, construction, and OSM teamod trensmouth PPP projects such as the Rich-Autorion Griege.

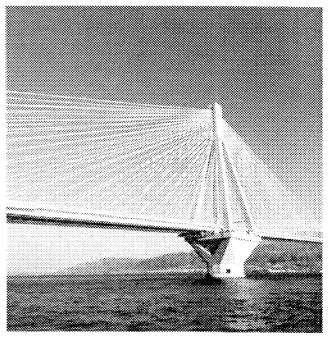


Table 4.1-18 hvb risk register with refore and after mitigation hish ratings

					Probability (P) 1 2 1 4 5 Severity (S) 1 2 3 4 Risk Rating (P x S) 1 4 9 16 28					
Access & EOV	Right-of-way not available when needed	3.	3	9	WVB has reviewed the expected POW Access dates and has adjusted activative of work to provide fixed retween when narcels are negligibed. Critical path activities and onlytide of organizated parada. No need to hay new parada.	2	2	4	None	Medium
Geologica	Tomost geological site discrepancies	4	**	16	WVB has revisiond IFA provided CUR and CRR. WVB has completed 4 mornal and independent reviews nit placed all parties have agreed an carried funnel work plan. WVB has baced achedule and nost of CRR information to remove risk. Additional measures are included for semporary support and excavation as required for each risk classification.	2	4	8	Medium	Mediom
Design	Main spen ibilled shalf techtations, foral design and geological considerations	4	4	16	Casign risks for figuridations increase geological conditions, seismic isoading, vessel impact and wind tooding. Figuridation design based on assumptions from the provision being information and technical provisions. WVB has done preliminary wind/seismic/vessel studies and included into fulls design. Caterberg test to be completed to confirm assumptions prior to design completed.	:3-	3	9	Medium	Medium
Gov't Approvats	Delays from pertrating and government approveds	2	4	8	IFA is providing major poverament approvate and providing prefinitionly permits. WV8 has kept all major bridges within some footprints of permitted bridges to remove into of requiring revised parents.		3	3	None	None
Eorstowiako	Crécolage suid distays due to Suismais évents			5	Overign performance ordana such as strain lights in nationaling steel and observe for primary and secretary bridge elements to minimize levels of damage.	1	3	3	Low	Mediani
flooding	River Hubring draming decays to construction	4			Coolign innovation includes precest rub fording to ben't expared timetims for foundation work. This bmits time succeptible in flooding risk during foundation work. This bmits time succeptible in flooding.	2	•	8	Lew	Mediani
Pagardous Material	Delays due to encountering Oxfordisco wiste.	2	3	8	Majority of construction is through goverheld, recrimental and farmland. The probability for finding historics materials is unlikely.  Maserdous instantal spills from their porties is unlikely dening construction cross conting markway is not becardous material marte. Wills will have all field generating trained on on Maserdous Material Plan, industrial town to spid forcer local and stops to take once becardous material random continuous and industrial is found including communication to IPA and mitigation of spreading.	3	3	3	Low	None
Construction Complétina	Schodule completion delay	A			WASI has completed detailed achedule of early exects (administrative, Shanding and design) to ensure rently construction start. Early isseign packages allow for early RFC, develops and earlier construction broughout. Bridge design recovers tedge from policial path work and provides fleat. Trained work to or professional path from start to faster to faster is based on Siday, per week. This above for solvefull recovery on weekends during exception work. All other famile work could be accomplished with socials and form stiffs to reduce time frame.	3	.3	3	High	High
Oracotronis	Traveling potent templaints	3	3	9	WV8 will have the appropriate organization structure, with staff available 2477 and an on-pail duty for managers, to adequately respond to immergenoises, incidents and any user complaint readily.	4	2	2	None	None
Mainterance	Unexpected instituteration required	3	4	12	MVB has pit in place a proortise exemperance strategy with delity visual inspections and frequent detailed inspections to rapidly identify and early smaller defeats before they become the problems. Durability of construction materials are angineered at acting stage.	3	2	€	Low	None
Semigrid	Cack of personnellanatemaks) equapment to Complete Project	3	4	12	WV8 is publing from team members local work force and in subsourtracting with many focal subsourtractions to utilize besting workforce, management and equipment that is absorby within the report, Material vandors and adaltional subcontraction have already been communicated with and are aware of schedule constraints and have continued ability to mest demands.	2	2	4	None	None
offstive	Inflation during construction and G&M	4	2	8	WVB has basigned halsoble and corg-basing elements, such as concrete poweriest that decrease the armoust of material act and frequency of replacements, minimizing risk from expassion to fidure cost escalation. Early stage procurement during construction and experiment purchasing	2	2	4	Low	None
ก็กลดระหนู	Orthophies obtaining hands required to pay for work	2	4	8	WV8 has created a linarce plan taking into account both finarizing posts and the financial needs throughout the design and construction phase.	1	4	a	Low	(.cm
.egistative folicy	Cranges in design and paratruries to see sofiety requisitions.	2	3	В	WWI has a seising salety plan that exempte, when possible, bufferit standards and inablies WVS terriact to and intemperate quickly rose legislation.	2	2	4	Medium	Łow
fechnology	New technology makes numeric systems, obsolida	4	2	8	WVB uses up-to-date behanding for us TTS and bringe recording systems	3	2	6	Low	None
Residual Value	Anticipation of rehabilitation works if needed before and of G&M period:	3	. 3:	9.	WVB will create a plan six years before translated and, through the those inspections leading up to handhade, identify and take care of issues. Design has incorporated stored residual file furthers such as compare payerness and existing structure deals replacements.	2	2		Medium	None

WWO factor technics

#### 4.1.7 ELECTRONIC DATA MANAGEMENT SYSTEM (EDMS)

A significant volume of data is generated, processed and shared within WVB's Team and with the IFA on a daily basis over the life of the Project. The documents and records to be controlled are summarized in Figure 4.1-15. WVB's approach and Electronic Document Management System (EDMS), called DyMaDoc, address each of the IFA's concerns:

# 4.1.7.a Maintaining Documents

4.1.7.b Format

# 4.1.7.c Project Documentation Security and Backup Approach

All documentation is securely stored and controlled digitally in DyMaDoc. This process
controls the evolution of a document during all stages
of its life, from preliminary to as-built status, regarding all comments, review status (stamps obtained from
designated authorities), and distribution. It provides
intuitive access to all applicable documentation via a
simple web-based interface. At all stages of construction, records are available to the IFA.

Secure access to the dedicated documentation, procedures and forms for each project management process is provided online via a fully interactive version of the

IMS, linked to DyMaDoc. Users click on a particular strategic process within DyMaDoc, which shows the user the related management process. Selecting a part of this process provides the user with an associated management process profile sheet that lists and provides links to all related documentation (such as, descriptions of procedures, template forms and applicable permits. Upon the start of the Operating Period, documents are transferred to the WVB O&M Team.

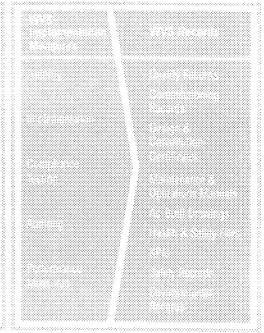
Documents to be distributed for information and review only are stored as PDF files, preventing unauthorized changes. Original, editable versions of documents are accessible only by authorized personnel. Documents are stored in the most relevant format; Microsoft Office, Primavera P6 or AutoCAD files, as appropriate.

Access to project documentation is available only to authorized personnel. Access is granted, accounts created and passwords provided for individuals according to their status on the project. Access is controlled via standard Windows Access Control Lists based on group memberships defined within an active directory.

Data is backed up to a secure cloud provider, where it is encrypted with a key known only to WVB personnel,

FIGURE 4.1-15 DOCUMENT CONTROL SUMMARY

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## Form N - Completion Dates

#### FORM N

#### **COMPLETION DEADLINES**

#### Milestone Schedule For East End Crossing

#### IFA Last Allowable Dates:

Milestone	Deadline
Baseline Substantial Completion	June 30, 2017
Financial Close Deadline	the date established by the Developer for Financial Close in its proposal, as such date may be extended by IFA as provided in the PPA, but in no event earlier than February 15, 2013
Long Stop Date	12 months after Baseline Substantial Completion
Final Acceptance Deadline	120 days after Substantial Completion Date

#### Proposal Commitment Dates (cannot exceed the above table):

Milestone	Deadline
Satisfaction of NTP1 Conditions	0 calendar days after the execution of the PPA
Satisfaction of NTP2 Conditions	139 calendar days after the date IFA issues NTP1
Financial Close Deadline	<u>4/1/13</u>
Commencement of Construction	<u>8/3/13</u>
Baseline Substantial Completion	<u>10/31/16</u>
Long Slop Date	<u>10/31/17</u>
Final Acceptance Deadline	2/28/17

#### EXHIBIT 2-F

#### INITIAL DESIGN AND CONSTRUCTION COMMITMENT

[attached]

## 4.2 Design-Build Plan



WVB East End Partners (WVB) has developed a Design-Build Plan (DBP) for the East End Crossing (Project) that is tailored precisely for IFA with the "End Goal in Mind." Led by the Walsh-VINCI Construction Joint Venture (Walsh-VINCI CJV), WVB's DBP provides IFA with innovative design, construction, and permitting solutions, which will result in the delivery of a high-quality, durable, maintainable, and aesthetic facility.

WVB's approach incorporates technical solutions with innovative features that exceed the contract requirements to provide IFA and the local community a world-class Project, WVB's integrated team combines Walsh's local and national knowledge with VINCI's technical and global experience, supported by qualified local subcontractors and designers.

Walsh-VINCI CIV's DBP is built on the principles of quality and safety in all elements. Both CJV partners being a part of the Concession and Operations and Maintenance (O&M) Teams strengthens the developmental processes through vertical integration and proves WVB's long-term commitment to IFA.

Che Toam, One Project, One Community

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with a selicited franchist the apparent

This combined teamwork ensures a quality result and approach throughout the entire defivery process, guaranteeing a successful Project for all parties.

The Walsh-VINCI CJV is led by our Construction Manager, Brian Hoppel, Brian has managed many successful projects for the State of Indiana and has the proven skills for incorporating innovation and quality into design and construction. These qualities can be substantiated through his most recent success, the Milton-Madison Bridge project.

Walsh-VINCI CJV understands the established Project expectations and goals. WVB's DBP has been developed to exceed the needs and expectations of IFA and the public. With the proven processes and experienced personnel in place, WVB will hit the ground running with creative and sensible technical solutions.

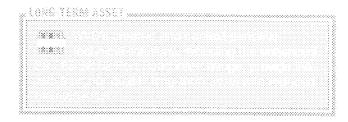
#### 4.2.4 DESIGN-BUILD TECHNICAL SOLUTIONS

Development of the Project provides the unique challenge of meeting the needs and requirements of two states while uniting them for a prosperous future with the East End Bridge serving as the connecting inspiration.

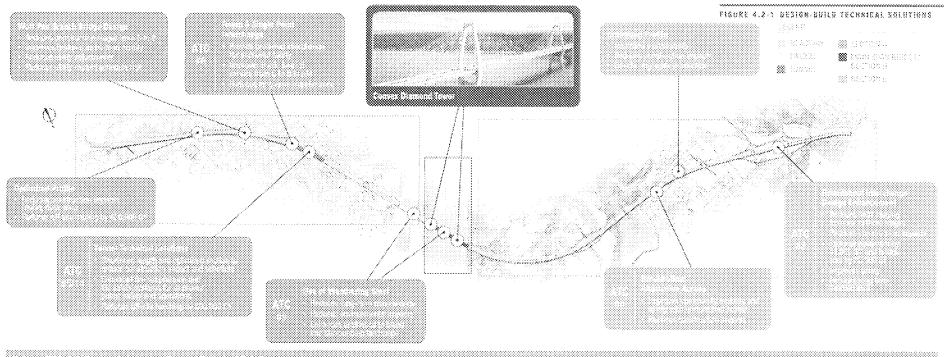
With IFA's provided Reference Information Documents (RID), the Walsh-VINCI CJV has analyzed the preliminary design and local community goals to develop innovative design and construction solutions. Involving the local community and other stakeholders in the development of the solution ensures the end product is a source of pride for the entire community.

Walsh-VINCI CJV developed solutions that meet all Project objectives and minimize environmental and construction impacts. Included in these solutions are seven ATCs that enhance design, provide long-term

benefits to safety and maintainability, and provide IFA a net present value savings. Originally presented as WVB ATC #3, the enhanced SR 265/SR 62/Port Road interchange improves construction efficiency for this element of the Project by 40 percent compared to the original concept, significantly minimizing associated construction impacts, improving safety, and reducing long-term maintenance. Walsh-VINCI CJV provides a summary of incorporated technical solutions and associated benefits in Figure 4.2-1.



#### 



#### OhbFenge

- Tumpel georgemetral enginetics and support
- Timmel construction schedule
- Constructing highway diraugh fields/sal sharartis assis

#### Daggebreicher Wegegiet.

- Wolf Per tonal residence and maintenance of baffin
- Dust, noise, and, siteosien
- Constituting within historical districts

#### > Technical Scioner

- Fiora Internal analyses to optimize excavation and regional measures, permaticross-section and shape, ATC 814
- Shorten Tunner length by 1456 and Zhinday (S-shift) escaration scrabbile
- Microsize construction activities to reduce impact to historic arce said design portals to bland with surrous iding landacage.

#### 🍃 Wingston

- Adjusted bridge isolution for single stage tinduo ravistrumios and reduced addity conflicts
- Optimized annie to religes seek talesting and reduced hourof by \$06,000 CY equation to over 2,354,000 track raises.
- Restboted work zones, temporary and permanent verwitest tramers, fencing and kenscaping.

#### Challenge

- Rever fleeding.
- Bridge height 300 restriction and object commitments
- Bridge aesthetics

#### Construction Impact

- · Marine traffic and safety
- resource treating stort partition
- Louisville Water Company wellhood protection
- Long ferticinabiliensmer environmental

## Yechnical Solution

- Presspt figating tab ligandation to militage twentiacturations and provide strationest construction, schedule.
- Canviex diginished tower provides most efficient cable/coper; fracture design
- Réduced overal nection for agreematie idealgn with blanded filmessame color and convex diamond tower

#### Nilityation

- Optimized design and construction staging to reduce adhesive and tritle is water
- Útříznej off site lugitastyle speci, designed šátát kystem for vácése náoč
- Weathering sleet for reduced mannersance and revolutioned at tradets, ATC #8

#### Challenge

- Interchange maintenance of traffic
- É arthwerk bakarang
- Existing bridge meintenance and handback

#### Charter Hite Saig Act

- · Brizachościw subdivision access
- · Edvirummental footbeins
- Yrawsing public disruptions.

#### & Telemone Exceler

- Em arced intendienge desain with induce traffic stepos and internven safety.
- Optimized mainline and local codiglication
- Réplacet existing budge denks for enhanced uneful de and recaceu long term replacement

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- Alfernate access route, ATC să
- Rodinate facility reductors price topoposit by 15 peres, reducted environmental impacts and imperient public safety
- Reclaire trafficulties upplicate medical file at handback by ultituring a long-term concrete passentiant design that intrinsics intertensions and rehabilitation work.

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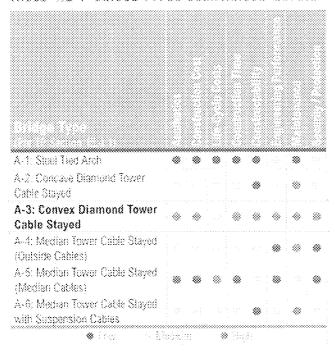
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#### 4,2,4,4 EAST END BRIDGE STRUCTURE

WVB envisions a unique, innovative bridge structure fitting seamlessly with the historic characteristics of the region. To meet this vision, WVB used the Bridge Type Selection Process (BTSP) information along with state-of-the-art engineering and construction techniques to provide the most efficient, durable, long-lasting and aesthetically-pleasing structure, WVB selected and designed a bridge structure exemplifying local historic characteristics, including slenderness and visual transparency, that are a source of pride for the community.

WVB experts, including Marcos Loizias and Donald MacDonald (Lead Engineer and Aesthetic Manager, respectively) evaluated each available structure type on the criteria shown on Table 4.2-1. WVB selected the most effective solution that meets all requirements and commitments: a cable-stayed bridge with convex diamond towers, Bridge Alternative A-3.

TABLE 4.2-1 BRIDGE TYPES COMPARISON MATRIX



#### 🗟 2.1.1.a. Profiminary Bridge Schemofic

The 2,280-foot-long convex diamond tower steel composite cable-stayed design provides an aesthetically pleasing and structurally efficient design. The bridge is flanked at each end by 115-foot-long steel plate girder simple spans for a total main span structure length of 2,510 feet.

While the overall length of the main span matches the RFP concept, WVB has reduced the length of the cable-stayed bridge by 230 feet, which provides several benefits including structural optimization, reduced construction and life-cycle costs, and improved constructability and safety. The Kentucky approach span is 1,966 feet long and features an eight-span continuous steel plate girder bridge. The full schematic of the East End Bridge is shown in provided roll plots and summary layout in Figure 4.2-2.

#### 4.2.1.1.5 Separacione Preliminary Casign

The substructure for the main span structure consists of Anchor Pier 2, Tower 3, Tower 4, and Anchor Pier 5 to support the cable-stayed bridge; flanked by Kentucky Pier 1 and the Indiana Abument.

The locations of Anchor Piers 2 and 5 have been optimized to 540 feet from the towers compared to 430 feet per the RFP concept. This arrangement:

- Improves superstructure efficiency
- Reduces pier vulnerability to collision loads
- Reduces bank impacts during construction
- Enhances access for future bearing inspections

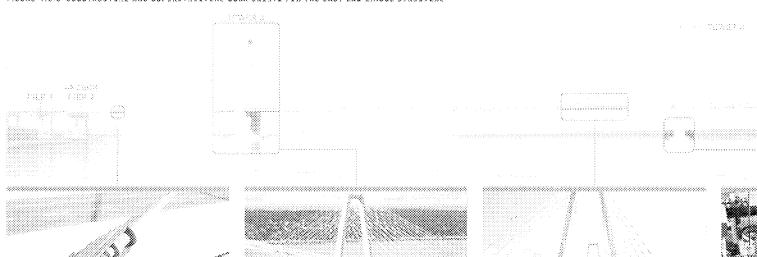
The anchor piers comprise three 8-foot-diameter, reinforced concrete columns extending from drilled shaft foundations. The Kentucky approach span piers are also three-column bents for aesthetic consistency but are founded on driven H piles.

The two convex diamond towers extend approximately 300 feet above normal pool elevation to become the dominant visual element of the bridge. The tower shape provides greater torsional and transverse stiffness to resist wind, seismic, and other load demands, and is a more redundant and robust structure than a single pylon structure.

Analysis of the provided geotechnical information concluded that the towers be supported by 8-foot-diameter drilled shafts socketed into bedrock at a depth of 110+ feet from normal pool. The drilled shafts are capped with a 16-foot-thick waterline footing and have a transverse shear wall between the tower legs for added strength to resist ship impacts. The waterline footings, constructed inside precast cofferdam tubs, minimize river flow disruptions, future riverbed scour, and navigation disruption during construction.

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#### FIGURE 4.2.2 SUBSTRUCTURE AND SUPERSTRUCTURE COMPONENTS FOR THE EAST END BRIDGE STRUCTURE



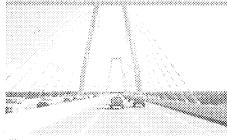


- Stay table system has a design service life of up to 75 years, 15. more than required.
- Bridge is supported by 104 paratiel-strong stay cables arranged. in a modified fan arrangement, which improves efficiency and reduces force demands on the edge dirders.
- 8. Stay cables are connected to edge girders using in-line, finshaped anchorages welded to the top flange of the edge garder which provides a direct load both of the stay forces through the top flange into the girder webs.
- Parattel strand cables composed of multiple 0.60-inch diameter. strands with multiple levels of corrosion pretection.
- tedividual strands encased in a polyidhylene sheath feled with a corresion blocking compound entirely surmanding the wires. of the strands. The brocking compound also reduces fretting. between wires and increases the fatigue ble of the strands.
- Strands housed inside a two-layer, co-extraded HIDPE cheath with double-help fillets to mitigate rain and world vibration.
- # lingiowered so that individual stay capie strands can be removed. for inspection and testing, or replacement if necessary, while mantanieu traffic on the bridge.



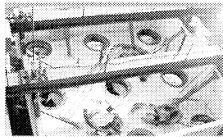
#### \*\*\* FAIN TOWERS HELLED Av.

- Aesthetically aleasing and structurally efficient convex diamond. stay towers extend approximately 360 feet above normal pool. elevation to become the dominant visual element of the bridge.
- Inclined reinforced concrete tower legs, with a hollow box. section, are stiffened by a roadway strol and a top strut, thereby reducing handing moment designeds in the tower sens.
- Lower lens hermit deer passabe of this superstructure for lass. of construction and simplicity of details, fix thro arrangement offers greater ease for stay cable force adjustments
- Structural steel stay cable anchor boxes are cast into the upper hower legs to provide anchorage to the stay cables. These "assumblies resist tenepe forces and ontinioned public loads
- Anchor box sections in 12-foot long segments are easily lifted. into place with a tower crane and connect to each other with boiled contractions. The anchor bases are shop fabricated as a unif to fully incorporate the geometry requirements for the stay cable anchors
- The stay cables and anchorage boxes are offset from the centerline of the tower legs to provide easy access for anchorage inspection inside the towers. Acress tudders and platforms are installed from deck level to lower top



#### 🎇 págk czosskazowca lighadla.

- Inclined stay cables support the bridge deck on each side, providing for out-to-out deck width of 123 feet 8 inches (reduced from 131 feet 6 inches per RIDA.
- 39 Bordae deck is composed of 7-fact-deep longitization steel edgic girdens on each side connected by transverse Boerbeams which support 10-inch-thick precest concrete deck penels and cast-inplace infolis to prests a composite roadway deck
- Use of steet-concrete composite section reinferties the weight of the bridge and unceterates construction.
- 2-inch thick latex modified concrete overlay is placed atop the precest panels, providing for greater durability and extended life of the deck
- is: Stay cable auchorages are spaced 45 feet apart while the floorbeams are spaced at 15 feet intervals, providing optimum efficiency of structural steel framing and concrete neck.
- 2. BP\$ 70W structural steet and high performance concrete are used in the bridge superstructure, providing optimum design and redubed mäintenance cests
- A full-length inspection calwalk with access holes through the Boorbeams is provided under the deck to allow inspectors to sasity walk the bridge langth below the deck.



\*\*\* FOUNDATIONS SELVICES

- Each stay tower is supported by 8-foot diameter drilled shafts. socketed into competent limestone at a depth of 140+ feet from normal pool elevation.
- Precast concrete cofferdam tups are used as a trenplate for installing the drifted shafts and to cast the waterline feetings Tubs are used as sacrificial forms and are not treated as structural members, mitigating maintenance of foundation concrete as related to local dumage in the event of vessel collision.
- Softerdam tubs allow for minimal use of magne equipment for drilled shaft installation, mitigating impacts to normal Ohio River barge traffic and repressional users.
- Orified shafts are capped with a 18-feet thick waterline facility. that, along with a transverse shear wall at the base of the stay tower legs, provides added strength to resist ship impacts.
- Wäterlink f\u00f3\u00f3\u00far cost savnas and easier construction white reducing environmental impacts, minimizing river tinkdisruptions, and preventing luture riverbed soour

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Stay-cable connections at the towers consist of structural steel anchor boxes cast into the upper tower legs. The stay cables and anchorage boxes are offset from the centerline of the tower legs to provide easy access for anchorage inspection inside the towers. Construction sequence of the towers, substructure, and superstructure is detailed in Figure 4.2-3, with full sequencing details and schedule provided in Volume 2 Appendices.

## 4.2.1.1.c Sepersheetine Preliminary Design

The deck of the cable-stayed bridge is a composite steel section comprised of 7-foot-deep longitudinal steel I-shaped edge girders on each side, transverse floor beams, and 10-inch-thick precast concrete deck panels. High-performance concrete (HPC) is used in the precast deck panels and infills, while high-performance structural steel (HPS) 70W is used for efficient girder sizes that resist axial and load demands.

MPS 70W weathering characteristics provide a more durable design with low life-cycle costs that achieves the 100-year design service life while minimizing long-term maintenance costs. Stay cable anchorages are welded directly to the edge girder top flanges, providing a direct load path from the cable through the top flange and into the girder webs. This

design enhances the aesthetics of the edge girders and optimizes structural performance.

The superstructure is erected simultaneously at the two towers using the balanced cantilever method, as shown on Figure 4.2-4, to expedite schedule. Pre-assembled 45-foot-long segments consisting of two edge girders and three floor beams are erected with a pair of stay cables installed and stressed, followed by erection and connection of precast deck panels. The superstructure section is erected using barge-mounted and tower cranes. Our staggered

#### FIGURE 4.2-4 BALANCED CANTILEVER METHOD

WV8 differs a fast-took. 7-day segmental erection bycle based on expension construction Rice-Artificia Bridge to Greece

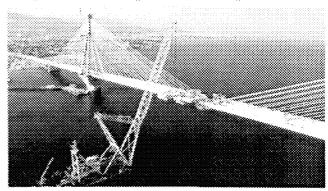
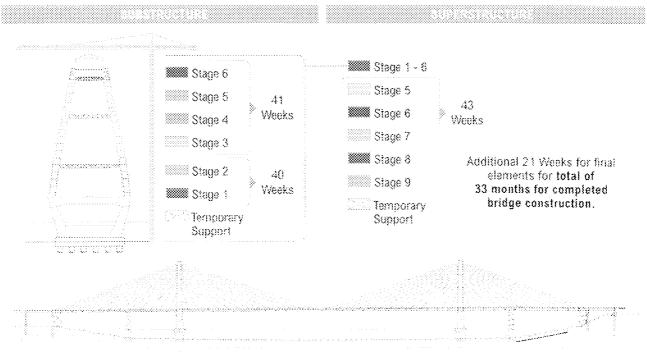


FIGURE 4.2-3 EAST END BRIDGE ERECTION SEQUENCE AND SCHEDULE

WVB's construction sequencing and corresponding coinsidate can be undergreence from other cathe-stayed and near process, structures, much as the Geldright or Consociation and two occurs Sévent Crossing in the United Societies.



erection sequence accommodates uninterrupted river traffic by typically isolating the floating equipment to a single side of the channel.

The Indiana transition and Kentucky approach span consist of nine lines of steel composite girders to support a reinforced concrete deck slab. The steel girders of the Kentucky approach are erected using land-based cranes to erect pier (cantilever) segments followed by drop-in segments between inflection points.

## 4.2.1.1.d Regelrements and Commitments

WVB's design meets the requirements of Government approvals, the NEPA documents and environmental commitments, and is sensitive to Louisville Water Company's (LWC) Wellhead Protection Area (WHPA) (Table 4.2-2).

## 4.2.1.106 Architectural Argument

The BTSP produced four publicly-presented aesthetic recommendations that have been followed by the WVB Design Team. The convex diamond towers and other curved vertical elements, such as the roadway lighting and pedestrian walkway railings, give the bridge

POSITIVE REPACT ON THE AREA AND COMMUNITY

a curvilinear theme. Bridge coloring uses uncoated concrete elements, rust colored structural steel, warm grey metal bridge elements, and classic white aesthetic lighting on the bridge. The BTSP also produced a list of suggested refinements during the design phase. Many of these refinements, including towers detailed with reveals and the curved open diamond shape creating slender towers, are clearly reflected in WVB's proposal design. Our design adheres to the MOA commitments including minimizing light, noise, and sensitivity to the historic cultural context.

WVB's design addresses all nine of the Techni""" cal Provisions' essential aesthetic design guidelines while creating a visually outstanding bridge
(Figure 4.2-5). The bridge design honors the local
historic and cultural context, borrows from local building traditions, and strikes a modern, efficient aesthetic
tone to create an understated architectural symbol for
the community that maximizes natural views of the
river and surroundings.

TABLE 4.2-2 MEETING REQUIREMENTS AND COMMITMENTS

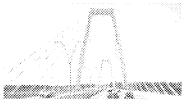
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	Carrier	
Crane Height	Crane height will be below height approved in FAA permit	······································
Bridge Tower Height	Tower height will be below height approved in FAA permit	1
Bridge Clearances	Provides full 900-ft permanent channel width and 600-ft channel during construction	1
Construction in Navigable Waters and fill	Proposed temporary and permanent fill placement is within range shown in permit application and is within RID design	· · ·
Placement of fill in waters of the U.S.	Proposed temporary and permanent fill placement is within range shown in permit application and is within RID design	√
State Water Quality Standards	Proposed construction essentially the same as RID proposal in manner and extent	√.
Construction near Tunnel	No pier construction within 40 ft of Tunnel	✓
Discharge of bridge drainage	All bridge runoff will be collected and properly disposed	
Use of polymer starries	No benionite or polymer sturries used for drilling within WHPA	<u>~</u>
Construction Equipment free of zebra mussels	All construction equipment used in the Ohio River and tributaries is free of zebra mussets	¥*
	Bridge Tower Height Bridge Clearances Construction in Navigable Waters and fill Placement of fill in waters of the U.S. State Water Quality Standards Construction near Tunnel Discharge of bridge drainage Use of polymer sturries Construction Equipment	Bridge Tower Height Tower height will be below height approved in FAA permit  Bridge Clearances Provides full 900-ft permanent channel width and 600-ft channel during construction  Construction in Proposed temporary and permanent fill placement is within range shown in permit application and is within RID design  Placement of fill in Proposed temporary and permanent fill placement is within waters of the U.S. Proposed temporary and permanent fill placement is within range shown in permit application and is within RID design  State Water Quality Proposed construction essentially the same as RID proposal in manner and extent  Construction near Tunnel No pier construction within 40 ft of Tunnel  Discharge of bridge drainage All bridge runoff will be collected and properly disposed  Where the permit application and is within RID design  No benionite or polymer sturries used for drilling within WHPA  Construction Equipment All construction equipment used in the Ohio River and

#### FIGURE 4.2-5 WYS HART END GRIDGE DESIGN EXCEEDS ALL ARATHETIC DESIGN EDICELINES

👐 tranggijih brade olum a davi erestracija i ina jera Hariwa ole i ila Kura jera ka Wila brgorijes jaka gavak. Mitama jera i ina jera jera i ina jera jera i ina jera jera i ina jera jera i ina jera jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina jera i ina



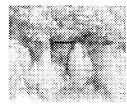


The bridge howers are modeled after the historic ground hog type time kills to create a symbolic, memorable bridge for focal residents. Both the time kills and bridge towers possess a simple, utilitarian aesthetic that highlights their understated gently conved architectural flan. Drivers will experience the tower legs' stacked concrete gradually anchors up and one them as they go through the lower operatings reminiscent, to time workers passing through the bisteric time kilns arched docoway.



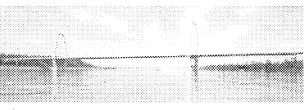


Natural views are preserved by maximizing the use of horizontal design exements because they do not restrict as much of the viewer's range as vertical elements and thus appear less obtrosive. For example, barrier components are designed to be mostly horizontal. The maximal section depth is minimized, contributing to this horizontality to be viewed as a line in the horizont. Furthermore, the pedestrian path provides previously unseen views downstream enhancing the area's notical views.

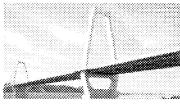




The bridge blends into the tandscape by relating to focal colors and finishes. All concrete support structures are stocaled concrete with horizontal grooves to minin local forcemitally bytered americane of this. Supporting the layer of concrete madway deck, a layer of weathering steel guiders and bearns creates a horizontal mist-colored datum similar to the neptrated byters of immunities that local limestone. Cohe and other motel elements are a warm create oclor found to be the most fixely to blend in with the naturally occurring stone.



WV8's design utilizes modern efficiency to be as visually transparent and mobitusive as possible. By splitting the superstructure into there members with an open dearnerd design, along with judiciously spaning the cables to spread our as they descend to eye level, elevers can before see through the bridge to the tandscape herend. The number and discaress of elements are efficiently minimized and spread across the view to substantially lesses the effect of the bridge on the view shot.





By paying critical attention to detail, the bridge becomes meaningful. Topoling and properly proportioning the flowers elements are critical large scale details. Smaller components are tailored at a scale appropriate for the various speeds of the bridges different users, such as madway lights for drivers and handrolls for padestrians. To create a cohorent experience throughout, the understated simplicity of efficiency is used where detail without any meaning would visually clutter the bridge.





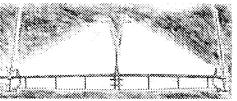


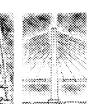


The bindge complements the semicundings by relating to the local vegetation, landforms, and materials. Sent roadway lighting poles and pedestrian barriers are modeled after enganically bent materin native trees along the river. The horizontal nature of the readway's form complements the area's numerous natural horizontal forms, such as the sarface of the river, the layered timestone outcroppings, and the fiar-hopped stuffs coerclooking.

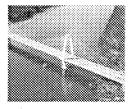


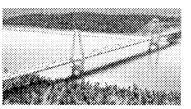
The pedestrian path is designed to be the must enjoyable way to pross the bridge due to its being user-friendly and maximizing the feeling of safety. User-friendly elements include the pedestran-scale size and spacing of barrier elements and the acts space provided at the lowers in stop, rest, and take is the view. Pedestrans feel safer due to the physical and vicual separation created by Rodard cables and barrier elements between the path and readway all the way across the bridge.





Safety, austhetic, and environmental tighting design features are implemented to be subtle and non-intresive. Towers and cables are up it from the readway to gradually drouse higher up and disappear into the sky Roadway lighting is mounted in the center of the madway spaced at the maximum safe distance so the maximum wife prevent light spilling over the bridge edge and intrusively flooding down owto the river or sherefore. Chily highly efficient LED lights are used to further resource any environmental impact.





The East End Endge is one part of an overall transportation project that stretches through Indians and Reduciny A consistent paidlife of malarias, and building forms bonoring the native land-scape is used throughout to achieve cohesiveness, such as westering steal, stacked amentione forms, and gorify conveid stages. Efficient design enables a shorter construction general meeting consistent aging throughout the whole project and further lending consistent strong throughout the whole project and further lending consistent strongs.

WMS restrictions . As . As.

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The portals and approaches for the Tunnel have been designed to blend with the existing surroundings and enhance the overall local landscape (Figure 4.2-6). Technical solutions incorporated into the plan minimize impacts during construction while providing the most efficient design to prolong asset life and increase public safety.

State-of-the-art life safety systems are used to provide an exceptional level of protection against a variety of fire types. A fire detection system is coupled with a foam/water sprinkler system and added drainage inlets to create a complete fire suppression system capable of controlling a flammable liquid fire. This system restricts the rapid spread of a Tunnel fire, allowing additional time for traditional fire-fighting techniques and emergency evacuation, improving safety for emergency responders. The Tunnel electrical system has been designed to fully withstand a fire event, further enhancing public safety. These design solutions, accompanied by an improved interior configuration, maximize safety egress and maintenance access, while providing a better long-term asset for KYTC.

Further, these solutions prolong the life of the structure and allow for an efficient O&M program when the Tunnel is completed. Consideration has been taken to shorten the construction schedule, reduce local impacts, and minimize maintenance requirements and cost.

With the Tunnel being the Project's critical path schedule activity, Walsh-VINCI CJV incorporates several innovations to complete Tunnel construction prior to

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IFA's deadline. This early completion allows opening of the Project to revenue-generating traffic by October 31, 2016, eight months ahead of IFA's goal of mid-2017.

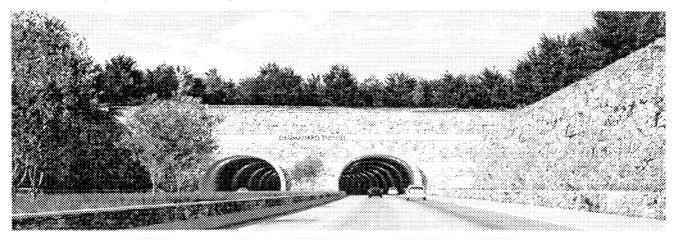
## 4.2.1.2.a Early Construction of Tonnel Elements

The excavation and support schedule for the Tunnel is based on the georechnical conditions under the Drumanard Estate. A detailed review of the conditions led to the selected drill and blast process resulting in specific temporary support measures and excavation cycle times for each rock classification. The cycle-times were expanded to develop the overall schedule using an offset multiple heading excavation plan as shown on Figure 4.2-7 and detailed in Volume 2 Appendices: Tunnel Construction Methods and Tunnel animation, showing the full Tunnel construction sequence. The temporary support system mitigates potential geotechnical risks and reduces the need to implement Tunnel contingency plans. Tunnel excavation and temporary support items are constructed on a 24-hour per day, five day a week schedule, with concrete liner work occurring around the clock.

Before commencing Tunnel construction, several preconstruction processes occur immediately after Project award and during the design phase. These include: community notifications, establishing a settlement and seismic monitoring system, and erosion mitigation measures.

### FIGURE 4.2-6 DRUMANARD FUNNEL NORTH PORTAL DESIGN

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#### FIGURE 4.27 PROPOSED TURKEL CONSTRUCTION METHODS AND SCHEOULE

- MB tunnel to advance ahead of SB sunnel by approximately 200.ft.
- \* Top section split into three headings led with pilot heading (1)
- Side headings (2, 3) to stagger behind approximately 58 %.
- is Bench excavation (4) to follow up headings.
- Drill and filest method to be utilized for excavation with blasting patterns and delays to control noise and vibrations
- 2 Daily cycles to be utilized for increased productivity, improved safety and reduced overall schedule and construction imposts

24 were termination apply sidelinging the substitute.

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 Temporary support and daily blasting lengths to be based on actual sack geology

Dell & Pack

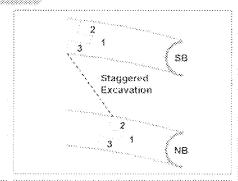
Temporary Support

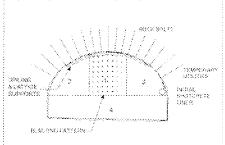
Temporary Utilities

Blast

Munck

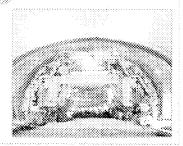
\* Eurither details provided in Volume 2 Appendices

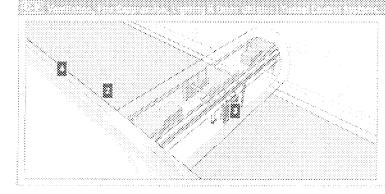




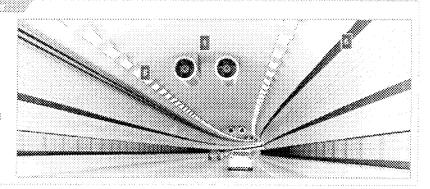
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- After excavation is completed, all dramage systems including waterproofing will be installed.
- Evening shotcrete tayer to be placed prior to waterproxiting membrane to resure solid contact
- Waterproofing membrane to be installed using high quality preven material.
- Reinforcement and inserts to be set in place for arch liner
- Arch liner to be poured in 40-48 ft, increments using a form traveler.
- Drainage and structural sub-base to be placed along with reinforced concrete invert
- Services to be placed with sep form power followed by conduct installation and walkways:





- Jet Exhaust Faris
   To bottle S8; 12 or the MB Torinet)
- Form Suppression System
  (3-inch line in Both Loneids)
- Delago valve Box
- Fire Main & Sprinkler Systems (6-in Jone in the SS Tepper, 8-in John MS Tepper)
- Lighting .
- Ceramio Ville Empsis



WV seared names

- CHORNAR & 1.4 Child Honor, Basket (Sho

## 4.2.1.2.b Interfacing with Property Owners

Keeping nearby residents informed of potential construction impacts is a top priority throughout the duration of Tunnel construction. The WVB Public Involvement Plan contains specific procedures for interacting with local residents and property owners near the Tunnel, including the Harbor at Harrods Creek, Bridgepoint, Shadow Wood, and historic properties such as Allison Barrickman House and Drumanard Estates & Strater House, WVB holds preconstruction and construction update meetings along with weekly notifications of blasting. These measures are in addition to WVB's proactive public relations approach to maintain public trust and integrity. A pre-construction survey is conducted as the first step of a detailed blasting plan, which utilizes a system to monitor vibration levels and settlement at surrounding structures. Table 4.2-3 summarizes this proactive approach.

## 4.2.1.2.c Limiting Dest, Weise and Vibrations

To reduce the impacts to the surrounding properties. Walsh-VINCI CJV minimizes the construction activities at the root of such impacts. The Walsh-VINCI CJV

## TABLE 4.2-3 WALSH-VINCI CJV WILL PROVIDE A PROACTIVE PUBLIC RELATIONS APPROACH

Sponsor fundel construction pre-work and update meetings.

Send weekly correspondence regarding blasting times (website, Twitter) as noted in our Public Involvement Plan.

Perform pre-blast vibration and noise analysis.

Perform pre-, during, and post-construction inspections of residences and local readways.

Provide 24-hour emergency contact information.

Ensure local fire, police and emergency response dispatchers have updated information.

Use temporary information signs to inform traveling public of bleating and construction events.

design shortens the overall Tunnel length, optimizes the Tunnel cross-section and raises the portal profile to significantly reduce the overall amount of rock excavation, resulting in less blasting, stockpiling, and haul-off. Additionally, the portal approaches have been designed to limit material haul-off and overall blasting. Technical solutions that remove impacts in addition to mitigation measures are summarized in **Table 4.2-4**.

TABLE 4.2-4 WALSH-VINCI CJV'S MITIGATION MEASURES FOR TUN	NEL CONS	TRUCTION	***************************************	
Eligates Reserve				
DESIGN TECHNICAL SOLUTIONS			***************************************	
Raised South Portal Approach profile decreases rock blasting quantity by 500,000 cubic yards, and associated haut-off of 1,100,000 truck miles	✓ · · · · · · ·	√*	4	
Shortened Tunnel length by 14%, reducing blasting timeline and overall construction schedule, minimizing construction impacts	Ý	1	w <sup>y</sup>	· 
Cross section optimized to reduce walkway width and minimize liner  ihickness to eliminate excessive excavation, hauf-off, and blasting (ATC #14)		<b>4</b>		
Construction mitigation soluti	ONS			
Strategically identified haul routes minimize construction traffic	1	*		*
Drilling and blasting operations to occur during daylight hours only	√ ·	<b>V</b>	v.	
Utilize blast detonation delays and adjust drill patterns to reduce noise and vibration, while maximizing efficiency			· · · · · · · · · · · · · · · · · · ·	W
Temporary or permanent noise barriers, including earthen berms, placed to limit disruption to surrounding neighbors; improving viewshed				¥
Project-specific Blasting & Vibration Plan with associated training, noise/ vibration monitoring and pre-blast analysis of surrounding structures	W.	. 4	1	V
Implement best management practices to minimize impact to public, i.e., water trucks, equipment mufflers, OSHA training	<u> </u>	- X	w <sup>e</sup>	4

These design innovations minimize construction activities and reduce the use of public travel ways for construction purposes, lessening the overall carbon footprint while improving safety for the traveling public.

As part of the mitigation measures, an open door policy is used with the surrounding communities to provide feedback if the initial mitigation measures are not sufficient. Walsh-VINCI CJV strives to mitigate all impacts promptly, while using community interaction to recognize and avoid potential complications.

## 4.2.1.2.d Acress Plan and Haul Roote Plan

Included as an impact mitigation measure of Section 4.2.1.2.c are the intended access plan and primary haul routes as shown in Figure 4.2-8. The Walsh-VINCI CIV has developed an access and haul strategy that decreases impacts to the environment, surrounding community, and traveling public. WVB's access plan allows early commencement of Tunnel excavation and continued progress throughout each traffic stage.

The original estimated 1.7 million cubic yards of haul off material would require a substantial amount of truck traffic through the local historic districts, drastically disrupting the everyday life of the local communities. Walsh-VINCI CIV has designed an optimized roadway profile that decreases the amount of rock excavation for the Tunnel south portal by 500,000 cubic yards. Additionally, the Walsh-VINCI

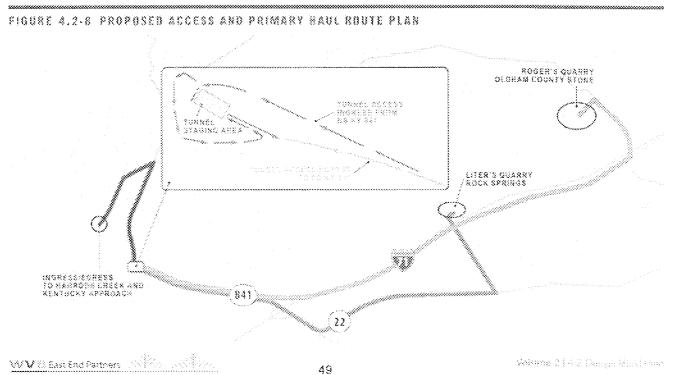
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CJV design improves sustainability by increasing the amount of fill material north of Harrods Creek, allowing for a overall haul-off decrease of 920,000 cubic yards, a 57 percent reduction.

Local quarries have agreed to process the excavated rock into a material suitable to be reused on the Project and other surrounding construction projects. The recycled rock is incorporated in natural berms for noise reduction and improve viewsheds for the historic districts such as the Rosewell House, Furthermore, a large quantity of material is transported to the north of Harrods Creek fill zone. Walsh-VINCI CJV identified primary haul routes along the KY 841 certidor that minimize construction traffic and reduce overall impacts to the surrounding communities.

#### ALZIKIS ROADSKAY ELEMENTS

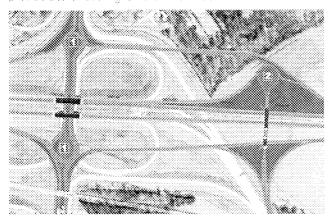
Walsh-VINCI CIV has incorporated many technical solutions into the roadway elements to provide IFA a lasting, durable, and sustainable East End Crossing. During preliminary design of the roadway elements, Walsh-VINCI CIV coordinated with WVB's O&M Team to review and provide increased life-cycle solutions throughout.



49

#### FIGURE 4.2-9 ROUNDABOUT INTERCHANGE

WVS enhanced reportable inferchange decigo (as presented in VVS ATC x3) asso **B** two multi-lens reportance (that replace the crossover diverging bleenend and traffic eignals) and **B** one single door reportation (that replaces two loop report) that provide a seter and higher lens of service.



Among the technical solutions is the roundabout interchange at SR 265/SR 62/Port Road (Figure 4.2-9). The redesigned interchange benefits include:

- Reducing long-term maintenance by eliminating two loop ramps and reducing 44,000 square yards of pavement and 23,000 square feet of bridge deck.
- Reducing traffic idle time and related carbon footprint by eliminating two traffic signals.
- Improving safety and reducing impacts to traveling public by reducing construction staging and removing 33 percent of traffic conflict points.
- Improving safety and increasing level of service by realigning ramps as shown in interchange traffic simulation (in the Volume 2 Appendices).
- Decreasing environmental impact from construction activities by reducing the overall Project footprint by 15 acres.

4.2.1.3.6 Staglag, Traffic Centrel, and Sequencing

During design development, Walsh-VINCI CJV sought out design solutions in construction staging and sequencing that limit impacts to the traveling public. Along with the reduced staging of the roundabout interchange, beneficial solutions were developed at three other locations:

Wolf Pen Branch Bridge redesign allows for single stage bridge construction (removes temporary bridge construction) and two stage MOT in lieu of five stages.

\*\*\*\*\*\* US 42 Single Point Interchange ATC #6 modi\*\*\*\*\* fications provide improved level of service and reduced construction impacts to local roads and communities.

Brookhollow Drive Alternate Route ATC #4
improves safety and reduces construction impacts through unrestricted access for subdivision residences.

4,2.1,3.xxx. Todfic Management, Control (begeending

Walsh-VINCI CJV employs a proactive traffic management approach to reduce impacts on the surrounding area and traveling public. Walsh-VINCI CJV's Maintenance of Traffic (MOT) Manager, Mark Fournier, has developed a Traffic Management Plan (TMP) with this approach to ensure a safe, continuous operating roadway for the traveling public that leads to limited disruptions. The TMP includes elements listed in Table 4.2-5.

## Table 4.2-5 traffic maintenance plan Elements

Temporary Traffic Control Plan with detailed MOT plans and traffic analysis

Temporary pavement design and unrestricted access details for all businesses and residents

MOT phase change procedures with clear responsibilities and processes for temporary signage markings that provide for safe traffic switches with limited disruptions

Work zone access, truck routes, and haul route maps to allow for safe ingress/egress for personnel and traveling public

Detour routes and project closures to be approved by IFA

Traffic Operations Plan describing key personnel and responsibilities

Emergency Plan and coordination with emergency services

Coordination meetings with adjacent projects, transit operators, utility owners, and local public agencies

Coordination with PIP and public communication implementation by Public Information Coordinator

Proactive communication measures such as public meetings, temporary signage, PCMS, and website notices

WV S East Eng Partners (Dec. Sho)

## #.2.1.3.a.F. Concentual Staglog Plants

Walsh-VINCI CJV developed detailed construction staging and MOT plans to ensure all components of the design are coordinated. Revised traffic staging at US 42, Wolf Pen, and Roundabout Interchange provide added benefits to the traveling public including reduced impacts and improved public safety. The conceptual construction staging diagrams are summarized in Figure 4.2-10 and 4.2-11 (and detailed in Volume 2 Appendices) for the following areas:

- Wolf Pen Branch Road
- SR 265/62/Port Road Interchange

During development of the traffic staging plans, Walsh-VINCI CJV reviewed and incorporated all requirements for ramp treatments and temporary or permanent drainage work. With enhanced designs and traffic staging, an added benefit is the limited amount of temporary drainage required. Local roads, including River Road, Utica-Charlestown Road, Brookholow Drive, and Utica-Sellersburg Road, have minimal disruptions and all construction and staging activities adhere to the final TMP. Preliminary detour plan for Utica-Sellsburg Road is provided in the Volume 2 Appendices.

### 4.2 1.3 a a) Buskers and Reselvatian Adults

Throughout the Project, Mark Fournier, MOT Manager, works with Dan Hartlage, Public Information Coordinator, to ensure safe unrestricted access for all residents. Details for temporary access driveways, detours, temporary closures and timelines are described in the TMP, approved by IFA and communicated to the public. Design solutions such as Brookhollow Alternate Route and Wolf Pen Bridge allow for reduced disruption to the local communities and unrestricted access.

The enhanced roundabout interchange staging provides unrestricted access to the Port of Indiana and River Ridge Development. The temporary

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traffic staging is designed to allow access for longtrailer vehicles including shipments of windmill blades or other long cargo. By way of the TMP, Walsh-VINCI CJV works closely with the Port of Indiana, other businesses, and local residents to ensure that construction impacts and disruptions are limited.

## 4.2.1.3.a.W. Construction Schadain & Sequence to Minimize Impacts

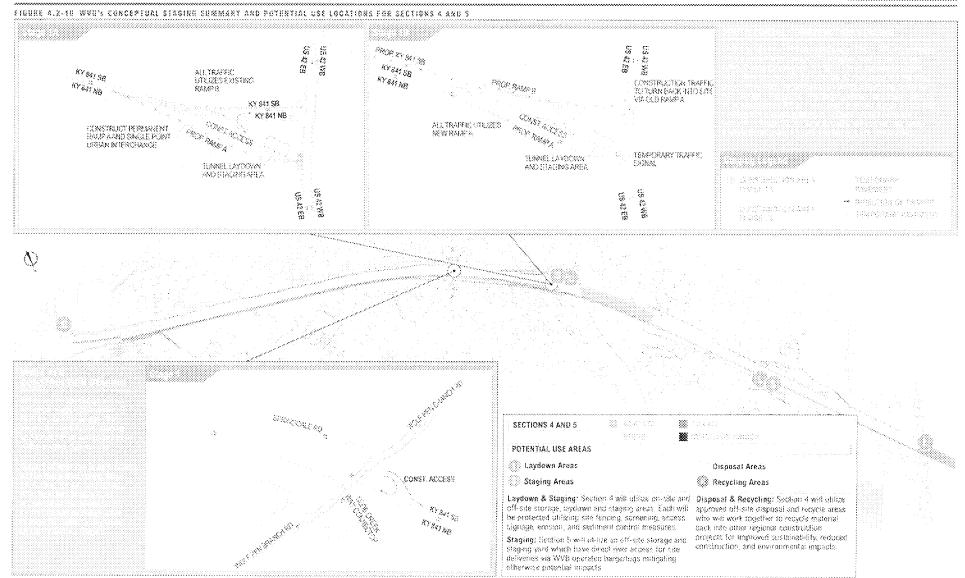
Walsh-VINCI CJV has mitigated potential impacts and the overall construction timeline through design innovation and traffic sequencing, most notably for the SR 265/SR 62/Port Road interchange. The revised roundabout interchange allows for more natural traffic movement and a simpler construction sequencing plan. The entire interchange can be constructed in three main stages, with only two adjusting traffic configurations. This approach drastically reduces disruptions to the traveling public and overall impact to the environment.

Along Wolf Pen Branch Road, Walsh-VINCI CIV developed a final bridge design that allows bridge construction in a single traffic stage with access within right-of-way, reducing traffic disruptions, and improving quality. Early in the development phase, public information meetings are held with subdivision residents to explain the traffic sequencing for Wolf Pen Branch Road and ensure community support.

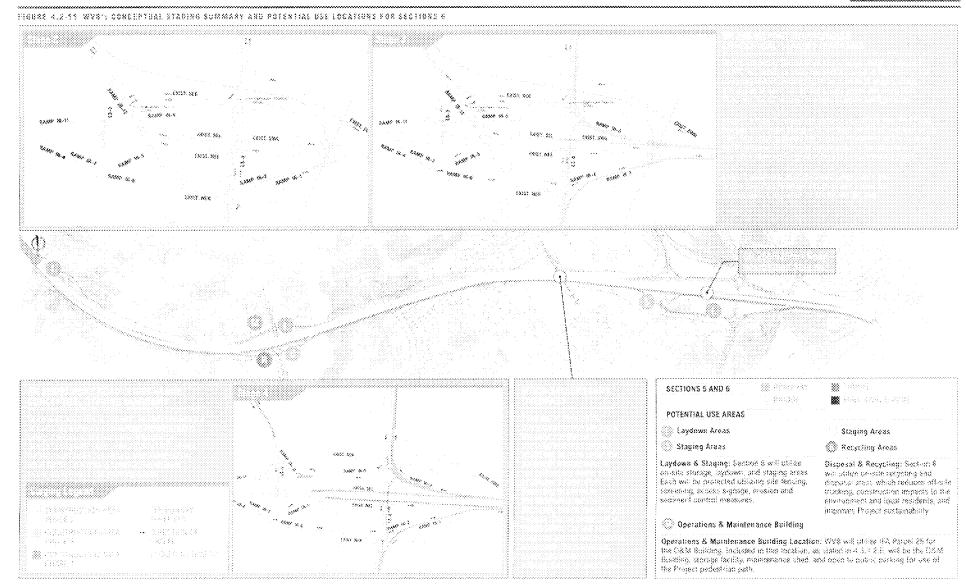
Walsh-VINCI CJV has incorporated environmental protection and mitigation into the overall design and development of the Project and will continue to further enhance mitigation measures throughout construction. These mitigation measures ensure that Walsh-VINCI CJV's construction efforts respect the existing land-scape, ultimately providing a Project with minimal environmental impact.

## 4.2.1 Staty Ezydovat Picceting Staging Giopesa 200 Mariamanos Lougrama

As part of the environmental training program, all employees are notified and trained on specific construction requirements around historic, restricted, and sensitive work zone areas, to help mitigate noise, dust, viewshed, and environmental impacts. Walsh-VINCI CJV has designated many construction staging, recycling, and laydown areas with these restrictions in mind as shown in Figure 4.2-10 and Figure 4.2-11.



WORKERS CORNER TO AND A



Staging and stockpile areas are kept off and away from sensitive and restricted work zones. Stringent restrictions are placed on all activities within the wellhead protection area (WHPA), specifically in the area of the Transylvania Beach Kentucky Approach Bridge (Figure 4.2-12). Site-specific environmental training is provided to all workers who enter the WHPA including strict restrictions that must be adhered to for all work.

## 4.2.1.3.5 Geologissics issies

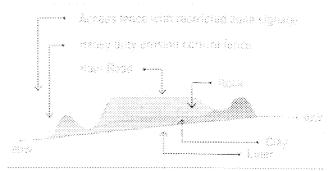
To proactively deal with geotechnical concerns, additional borings are taken throughout the site. The exploratory drilling helps provide additional information on types of materials to be found, depth of rock strata, and possible existence of karst features.

Based on the provided information and for additional locations where poor ground conditions are encountered, the best-suited solution is implemented to remedy the situation (Table 4.2-6).

To improve Project sustainability, limestone material is recycled as embankment material and aggregate material. The reuse of rock increases stability in large embankment areas and improves

#### FIGURE 4.2-12 WHPA HAUL ROAD

Wallst-1990 CJV developed a protective system, legislating impermisebilit learn and foreign, for hand rasid socially governance well-of the MBIPA for the NY John Schland Main. Span foreigns,



poor soil conditions. Walsh-VINCI CJV has performed near site investigations and discussed potential risks with local quarries and contractors familiar with the surrounding geotechnical profile. Where shale is present within the final excavation limits, a protective membrane layer is applied within 24 hours of exposure to prevent deterioration of the shale face due to the elements. The portal walls have also been designed to minimize the shale exposure in the rock slopes, resulting in less maintenance for KYTC and improved traffic safety.

## \*\*\* TABLE 4.2-6 TECHNICAL SOLUTIONS FOR SOIL IMPROVEMENT

	magnessmant National	Terror of Courses
North Portal Approach	Potential Swelling Shale; Fractured Rock	Shotorete Membrane
Tunnel Approaches	Rock Face Stability	Rock Botts
Port Road Structures over Mainline 25/26	Poor Soits, Seittement, Stability	Soil Undercuts with Added Geotextile Fabric and Granular Embankment
Mainline Bridge Structure 11/12	Poor Soils, Settlement, Stability	Aggregate Piers
River Road Fill Zone	Settlement	Pre-Loading
Throughout Mainline Fill Zones	Poor Soils, Stability	Rock Embarikment and Limited use of Geogrid with rock/cohesive fill
Throughout Mainline Fill Zones	Poor Soils	Olsk/Diry Soils for Reuse on Project
Throughout Mainline Fill Zones	Settlement	Staged Construction for Embankment

Additional soil improvement measures are not expected to be needed, but WV8 has extensive knowledge with other improvement types such as low density fill material, cement or time treated soil modification, geogrid, and wick drains.

# 4.2.1.3.c Road and Property Maintenance & Protection

Walsh-VINCI CJV takes measures to reduce trucking impacts on local roads, maintain a clean site, and minimize construction activities that may significantly impact sensitive areas. These efforts are supported by continuous two-way communication with local stakeholders and residents and are managed and monitored through our project Public Involvement Plan. Measures to minimize impacts are summarized in Table 4.2-7.

Additionally, near historic and residential areas, temporary or permanent viewshed improvements are implemented to limit the viewshed impact from the construction activities. To further limit impacts to the surrounding communities and local roads. Walsh-VINCI CIV has incorporated material staging within the site limits whenever possible to improve sustainability, reduce off-site trucking, and reduce the overall carbon footprint of the Project.

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## 4.2.1.3.d Preliminary Readway Schematic

Walsh-VINCI CJV's technical solutions and roadway concept are shown on the roll plots. These solutions include:

- Enhanced SR 265/SR 62/Port Road Roundabout
- W US 42 Single Point Urban Interchange
- Brookhollow Drive Alternative Route
- Mainline Profile Optimizations
- Other beneficial characteristic changes

Walsh-VINCI CJV team members, American Structurepoint, Heritage Group, and other pavement consultants have worked with VINCI Concessions to develop an innovative and easily maintainable pavement design that provides a long-lasting life-cycle. As discussed in Section 4.3.1.2 a, the pavement life-cycle analysis proved the designed concrete pavement structure, which follows INDOT pavement design guidelines including open drainage layer, provides the best long-term solution for IFA and stakeholders and provides additional residual life beyond the requirements.

## 4.2.1.3.e Characteristic Companison

**Table 4.2-8** highlights the characteristics of our schematic that differ from the RID Schematic.

Design improvements (profile optimization, raising Turnel south portal, staging adjustment at Wolf Pen and interchange)

Limited night and after hours work activities including guidance near residential, historic and sensitive areas

Water control, street sweeping, and calcium chloride

Perimeter erosion control, ditch checks, diversion ditches, rock check diams, and sediment basins

"No Access" fence and signage

Temporary and permanent noisewalls, berms, and landscaping

Pre-work plans

#### TABLE 4.2-8 CHARACTERISTIC COMPARISON

2000 Anni 1900 C.V. has improvide a more demonstrative, extenting the province on most VV, and particle and the life Vandag affect on the constraint of the province of the Constraint of the Vandag affect of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the Constraint of the

ptimized Profile and Sec-	<ul> <li>Raised KY 841 profile from Wolf Pan Branch Road and through Tonnel to the north</li> </ul>	Provides a better balance of cut and fill requirements reducing moving of material onto and away from site.	• Roll Plot Schematics
ons of Entire Roadway	Yunnel portal and adjusted retaining walls	- Reduced off site hauting by 920,000 by, which reduces truck trips and their impacts to local residents and roadways	- Section 4 - Sheets 1-4 of a
istem – Including East End Idae	- Raised overall profile of Tunnel	- Reduces naise and dust impacts associated with having	Section 5 - Sheet 1
inge	<ul> <li>Lowered profile of East End Bridge, while maintaining all required vertical clearances</li> </ul>	Reduces impacts of local traffic during construction	• Section 6 - Sheets 1-10 o
	Reised readway profile above 100-year stone elevation at the north portal of the Tunnel     Lowered the readway profile through the fill area between the Marmos Creek and	<ul> <li>Reduces construction duration, meaning reduced impacts to local residents, traffic and the environment associated with orgoing construction</li> </ul>	
	approach bridges	Reduce total quantity of rock cut, thereby reducing blasting and its potential impacts to local residents.	
	<ul> <li>Adjusted cross-sections throughout Section 4 to match technical provisions</li> </ul>	Reduces flooding risk to Sunnet, improving safety and reducing maintenance costs	
	<ul> <li>Adjusted profile throughout Section 6 including at Utica-Setteraburg Road, growthollow Road, and river approach</li> </ul>	- Raduces bedge height minimizes visual impact of main span bridge and approaches	
odified US 42 Interchange	Eleminate "flyover" on Ramp A and replace with single point urban interchange style	<ul> <li>Reduces conflict between Tannel construction and ramp construction</li> </ul>	· ATC # 6
KY 841 with US 42	cornection between NB KY 841 and US 42	Improves safety during Tudnet exponention	- 8plf Plot Schematics -
TC #6)		<ul> <li>Provides improved ldog term capacity to handle traffic growth and maintain acceptable level of service.</li> </ul>	Section 4 - Sheet 2 of 4
		Reduices treffic impacts to traveling public by achieving final configuration earlier	
evide Alternative Access to	<ul> <li>Provide excess to Srockhollow development via atternate route.</li> </ul>	<ul> <li>Reduces construction requirements thereby shortening construction period and reducing impacts</li> </ul>	• ATC #4
ookhollow from SR 265	• Eliminate Budge 13 from RID	Reduces maintenance costs by reduction of bridge elements.	- Ball Plot Schematics
		Provides for future widening without local hieldic impacts	Section 6 - Sheet 2 of 30
t 265/SR 62/Port Road	<ul> <li>Eliminated diverging diamond interchange at SS 265/SR 62/Port Road and replaced</li> </ul>	Eliminates long term maintenance associated with traffic signals.	- Roll Plot Schematics
erchange Configuration	with roundabout interchange	<ul> <li>Reduces long term inspection and maintenance, by reduction in pavement of 44,000 sy and bridge densi of 23,000 sf.</li> </ul>	Section 6 - Sheet 3 of 10
	<ul> <li>Roundshout design adjusted rump locations, hridge locations, profiles, bridge widenings and other associated items (fightling, drainage, signage)</li> </ul>	<ul> <li>Continuous movements of roundabout reduce congestion and fuel consumption providing more sustainable solution.</li> </ul>	
	<ul> <li>Roundshout design reduced number of new hildges from 5 to 2</li> </ul>	<ul> <li>Allows improved MOT reducing phases, shortening construction and reducing impact to traveling public and residents</li> </ul>	
st End Crossing - Main	<ul> <li>Sølected Bridge Type &amp; 3, convex diamond, for East End Crossing</li> </ul>	<ul> <li>Reduces overall fordprint and impact of the project on the adjacent environment and seathetic viewshed</li> </ul>	• Roll Plot Schematics
ble-Stayed Bridge and ntucky Approach	<ul> <li>Eliminated genter columns and moved roadway sections together into a single</li> </ul>	<ul> <li>Allows Piers 2 and 5 to be moved to find reducing their impact on the river</li> </ul>	Section 5 - Sheet 1 of 1
marek sebtuaren	structure for Main Span Bridge and KY Approach Bridge	Narrower width reduces impacts to LWC Weshead Protection Area	<ul> <li>Roll Plot Schematics</li> <li>Section 4 - Sheet 3 of 4</li> </ul>
	Adjusted roadway approaches cross-section to match bridge	Reduces the number of beam lines required to support the same number of traffic lanes.	
vised Emergency Access	<ul> <li>Shifted the emergency access read to the west side of KY 841</li> </ul>	<ul> <li>Eliminates operations and maintenance associated with stormwater treatment structure</li> </ul>	Roll Plot Schematics
ad in Section 4	~ Eliminated those retaining walls	<ul> <li>Eliminates maintenance and any future repairs of three robusting walls that are no longer required</li> </ul>	Section 4 - Sheet 3 of 4
	<ul> <li>Replaced artificial treatment structure with natural detention pond</li> </ul>	Reduce off site impacts of material hauting and disposal, overall reduction of emirenmental impact	
olf Pen Bridge -	- Shifted Wolf Pen abutments	Elimination need for heroporary bridge and construction impacts to traffic	<ul> <li>Roll Plot Schematics</li> </ul>
wised Configuration	- Constituti Wolf Pen Bridge in single stage	<ul> <li>Allaws for traffic control justeins that are easier to navigate providing safer conditions for implorists</li> </ul>	Section 4 Sheet 2 of 4
		<ul> <li>Shortens construction duration recuces impact to traveling public and residents</li> </ul>	
timized Tunnet Cross Sec-	- Søduced Piliar Width at South Portal from 46 ft to 35 ft	Reduces quantity of rock ercavation for Transi which reduces impacts from training activities and hadring of spoil	- AFC #5 and 14
n, Access Read, Reduced for Width, and Tunnel	<ul> <li>Modified walkway widths and cross-passage locations within the Tunnel</li> </ul>	matyrisi off site	Refl Plot Schematics -
ngth	<ul> <li>Shortened both Turnels by 270 fl</li> </ul>	Reduces Turnet maintenance costs associated with lighting, cleaning and drainage	Section 4 Sheet 2 of 4
··••	<ul> <li>Optimized cross-section shape žed ali offity systems per technical provisions</li> </ul>	Reduces construction timeline associated with Tunnel construction and overall Project schedule.	
		Minimizer shale mit-gation measures, as the Tunnal begins beyond the shale layer, reducing temporary support	
		<ul> <li>Improves the efficiency of the Tunnet vertibilities and the suppression systems and reduces long-term maintenance</li> </ul>	
265 interchange with ca-Sellersburg Road	- Shortened Structure 14 and reduced overall bridge riscs area	<ul> <li>Improves Turnet access and safety for emergency prews</li> <li>Reduces lang-term maintenance of bridge elements; reduced lang-term inspection requirements</li> </ul>	Red Piof Schematics -     Section 6 - Sheets 2 of 10
.M Pavement Design	WVS SR-vear controls pavernent design	- Sadunes inno-term examination	• Roll Plut Schematics
etion			• Mos mus somemaros - Section 4 - Sheet 3 of 4
	Ordnési shoulder design	Privates higher residual life     Privates higher residual life	Red Ptot Schematers -
		Reducés disruptions to traveling public.	Section 6 - Sheets 1-10 of 5

# ALILTA BRIDGE STRUCTURES, RETAINING EVALUS, ROISE WALLS. A SURFACE STRUCTURES

Along the East End Corridor, vehicles travel over and past bridges, retaining walls, and other structures that are designed to harmonize with the natural landscape of the region (Figure 4.2-13). As part of the technical solutions incorporated by Walsh-VINCI CJV, weathering steel and prestressed concrete beams are used throughout for visual appeal and reduced maintenance. Wolf Pen Bridge was redesigned with adjusted abutment locations to allow for a single stage construction and improved quality.

Walsh-VINCI CJV's enhanced staging plan for the SR 265/SR 62/Port Road interchange minimizes bridge widening, provides improved quality, and reduces construction impacts. Through careful design, material selection, and construction quality, Walsh-VINCI CJV delivers structures that minimize long-term maintenance and provide self-sustainable, aesthetically pleasing structures that blend with the character of the region.

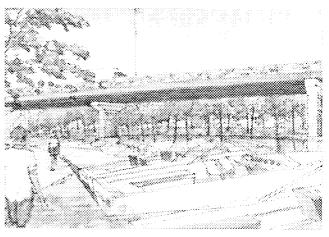
## 8.2.1.4.a Selection of Materials

To meet IFA's goals of Project quality, safety, sustainability, durability, and cost, the material selection process was completed by WVB's qualified architectural, construction, and procurement teams, with additional support from the Environmental and DBE teams. The choice of construction materials for each structure was based on the unique structure setting requirements and WVB's first-hand knowledge of material selection that works with Midwest features and climate. Walsh-VINCI CJV's goal is to utilize materials with:

- Superior Quality and Proven Performance: Use only structural steel, concrete beams, and MSE walls from suppliers with proven performance.
- Durability, Reliability, and Sustainability: Reuse limestone material on-site and locate a concrete plant to decrease environmental impacts and improve material quality.
- Reduced Long-Term Maintenance: Use weathering steel where applicable to reduce future painting expenses. Continuous structural units and integral bents remove unwanted joints at bridge decks.

#### PIGURE 4.2-13 HARRODS CREEK BRIDGE

Whathuring stepi, as seen here for Parcode Cruck Brocks, used disoughest for long life cycle, veduced engineering proentencied abstitution.



Visual Appeal: Subdued, unobtrusive materials that blend with their surroundings are selected. In Indiana, precast beams blend with the subdued landscape; in Kentucky, weathering steel blends with naturalistic stained limestone.

Walsh-VINCI CJV actively encourages local vendor/ DBE participation to positively impact local business and community relations.

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WVB has advanced the design of the RID documents for the bridges and walls with the following goals:

- Provide constructible/cost effective structures.
- Reduce impacts of construction on adjacent properties and traveling public.
- Provide opportunities for aesthetic enhancements consistent with the existing environment.
- Standardize structural elements to optimize both the design and construction processes.
- Implement structural details that promote durability and ease of maintenance.

The location, size, type and clearance information for all of the bridges and walls are shown on the provided roll plots and summarized in Figure 4.2-14 and 4.2.15.

## FIGURE 4.2-14 WWE'S DECTION A STRUCTURE DUMMNRY SCHEMATIC \*\*\* WOLF PEN ROAD GVER BY 841 Presidence de Cardina de Métable de Espendi 1,65 600 (180)-01

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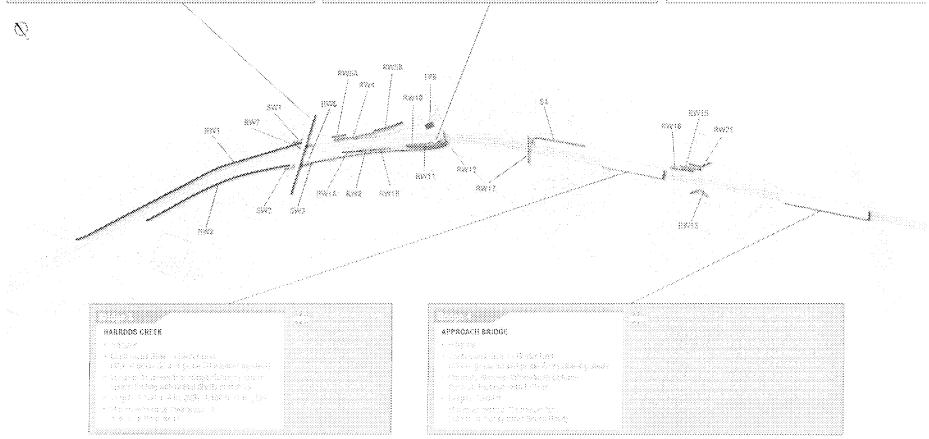
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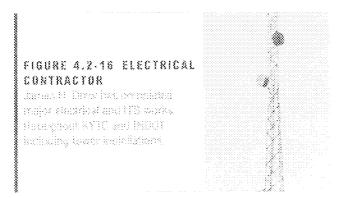
#### 33.50 SR 265 58 (6) / WE (7) OVER UTICA CHARLESTOWN ISB 365-66 (11) / WB (12)OVER LEXTZER CREEK PORT FIGAD OVER RAMP RE-U SRIEDS W8 (19) / E8 (20) OVER SR 62 BOAG AND LENTZEER CREEK TRIS. AND SPOORHOLLOW ORIVE OVER LENTHER CREEK Servenono Colemana Prak espara duction But Mathematic Exercisis diggs for business - British with mit problem by a west flee, as the Higgs with Blackwish the Hose Online's Points well are sufficien-其整理的 多型作用 电路 ingo 3410 es. k Brigariean Nemera, Gerardinka i Alfrick na 33993 80% . 8398.6<sup>1</sup> 33707 SECTION 6 95410494 🎇 મહા સંસ્તાનો જેવી નુજસ્સ R3V0 1000 330.50 SR 265 EB (9) / WS (10) OVER STUCA SELLERS SURE POST ROAD OVER SE 265 LE ARD WE RAMP (R-1 (15), SR 265 WR (16), 6ND 5R LENIZIER CREEK TRIE. SOAD OVER SR 265 265 BB (57) OVER OAD AND CASC RRS. n Russimonon Compressio (Am Persand). In German Bodo Bot Bookes Epikinsáuh Carbbasen férturátusun Concesta Tarapasa Harrin Historia de despuis final franchische der · Establisher stegat Entire - Extrate Australian generalist and the second Length CM in Plan in the HB in in the integral ZB (Research p. M) Fernger bestär Gin.

VEW SE East Cod Features

FIGURE 4.2-15 WYS'S SECTION 6 STRUCTURE SUMMARY SCHEMATED

### ALZ.4.5 ITE SYSTEMS

Because of the importance of design, selection and installation of an Intelligent Transport System (ITS), WVB has teamed with INDOT's major player in ITS construction, James H. Drew. Having successfully completed over \$250 million of electrical work in Indiana during their 65 years of experience, James H. Drew successfully designed and installed more than \$30 million of ITS work over the past 12 years (Figure 4.2-16). With an outstanding record and ITS pre-qualifications with INDOT and KYTC, James H. Drew solidifies the team's preliminary design and construction effort to formulate a detailed ITS design (including commissioning) and open to traffic plans that meet INDOT and KYTC expectations.



### 4.2.1.5.2 ITS Equipment Piecement

The system is extremely modular to allow for upgrades, and to interface the new systems with existing systems. IFA's ITS program requires advanced sensors, communication systems, and data processing to identify incidents quickly, and aid in response to minimize traffic effects. The proposed locations of ITS system elements are summarized in Table 4.2-9 and are shown on the ITS Schematics in the Volume 2 Appendices.

The ITS design includes all communications, power and supporting infrastructure to provide a fully operational network. The system is fully integrated and controlled by the Department Traffic Management Center (TMC) for devices located in Indiana and by TRIMARC for devices located in Kentucky.

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Vehicle Detection	Spaced every 0.25 to 0.30 miles
Roadway Weather System	Kentucky approach of the East End Bridge
Virtual Weigh Stations	Along each direction on Indiana river side
Reference Markers	Along all approaches of proposed highways
ссту	Interchanges, on bridges, and inside the Tunnel
DMS	Kentocky approaches (4), Indiana approaches (2)
Lane Control Systems	Inside the Tunnel
Wrong Way Detection	Tunnel approaches
Intrusion Detection	installed in maintenance access areas on East End Bridge
HAR & WIZARD System	Installed at the East End Bridge

## 4.2.1.5.b Preferency ITS Test and Commissioning Plac

Before new systems go into operation, Walsh-VINCI CJV monitors and oversees formal documented testing. As part of the Definitive Design of Operations (DDO) document, Walsh-VINCI CJV developed a test plan to verify the functionality of the ITS components, devices, and communication networks. The test plan includes a test schedule, system acceptance criteria, procedures for troubleshooting and retesting failed equipment, and all test procedures. Test logs are developed to record results and are used to submit a formal test report to IFA that includes test-by-test results. Elements of this testing plan include:

- Factory acceptance testing with required access and advance notification to IFA.
- Post-delivery testing.
- Integration from third party integrators.
- Installation testing with confirmation of compatibility with TRIMARC, TMC and MetroSafe.
- Final acceptance testing with end-to-end, controlled environment integration tests of hardware and software in accordance with the test plan.

## 4.2.1.5.c Prefiningry (TS invisions) on Plan

As part of the DDO document, Walsh-VINCI CJV develops a preliminary installation plan that includes:

- Installation management procedures
- Control of the work and record keeping
- Subcontractor activities
- \* Activities by worksite
- Subsystem and component installation sequence
- « Completion schedules by phase.

All ITS design is reviewed by WVB's quality process including coordination with other civil and structural disciplines. The full design is integrated and installed with coordination from TMC and TRIMARC to ensure WVB provides the best system.

### 4.2.1.5.d Open to Traillo Pion

Walsh-VINCI CIV's Open to Traffic Plan (OTP) establishes our coordinated approach with TMC/TRIMARC in taking over and using the ITS to support the safe, successful opening to live traffic. The plan describes the measures taken prior to and following opening, including team member responsibilities and related performance monitoring steps. Prior to opening, WVB does the following:

- Develop a schedule to support handover
- \* Train personnel and provide O&M manuals
- Demonstrate full functionality prior to opening
- Plan handover activity to anticipate and resolve any potential issues in advance

Following opening, WVB continues to communicate with TMC and TRIMARC to ensure systems operate correctly and initially maintains day-to-day operations of the system. Walsh-VINCICIV's OTP establishes our related communication procedures that commence with the identification of the sequence and schedule of construction works to be communicated to motorists. The OTP includes the development of messages to be used on the DMS at approaches and throughout the corridor, as well as advance signage required to alert the public to construction works and subsequent road changes.

To support communication with TMC and TRIMARC during construction, ITS devices (such as DMS, CCTV and HAR) are used to monitor work zones and advise TMC and TRIMARC of unexpected traffic conditions such as accidents and congestion.

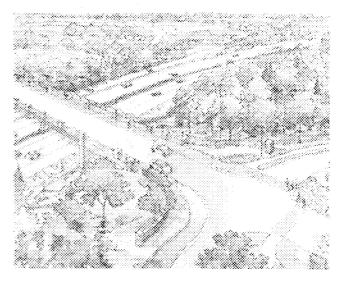
#### 4.2.1.6 CONTEXT-SENSITIVE SOLUTION ELEMENTS

Throughout WVB's preliminary design, special attention was devoted to developing the East End Crossing to fit the region's historic character. WVB has developed the plan from previous research, such as the 2007 Aesthetics and Landscape Architecture Guidelines (ALAG), Kentucky East End Approach Aesthetic Design Guidelines and the Bridge Type Selection Process (BTSP) documents. From these documents supported with site visits, photographs, and other research, WVB developed an Aesthetic and Landscape Concept Master Plan (ALCMP) as provided in Volume 2 Appendices.

\*\*\*\* The ALCMP provides design solutions for landscape and aesthetic enhancements along the corridor that are sensitive to geographic, natural, historic, and cultural context and responsive to expressed preferences and desires of the local community and stakeholders. The context sensitive design vision set forth by IFA provides information on the context, concepts, and design criteria envisioned by stakeholders, which WVB has integrated and translated into new proposed design solutions. WVB's intrinsic philosophy shown in the ALCMP addresses the needs and desires of the stakeholders to have an aesthetically pleasing environment along the new transportation corridor, while ereating a context sensitive solution and preserving the integrity of historic landscapes and character areas (Figure 4.2-17).

#### FIGURE 4.2-17 STREETSCAPES ENHANCEMENTS

Sheptocapilo principrements slong Wolf Pen Branch Rood provides visual application willing secretary service.



Key principles to providing environmentally appropriate landscape and aesthetics design are as follows:

- Respect, restore, and emulate the character of the existing natural environments and cultural landscapes, both natural and man-made features, impacted by the new improvements.
- Select material and architectural framework for context sensitive solutions of the various historic properties and the surroundings.
- Reinterpret materials and architectural styles with modern materials and treatments for safety, durability, and efficiency.
- Léverage new improvements to provide new and restored habitat for native wildlife and provide connectivity for plant, wildlife, and communities.
- Sustainable planting palette that includes adapted, native, low water use and non-invasive species.

WVB's ALCMP, as summarized in Figure 4.2-19
respects aesthetics created by historic landscapes designed by Fredrick Law Olmsted, Marian Cruger Coffin, and Arthur Westcott Cowell. The Master Plan design works within this cultural, historic framework to illustrate how context-sensitive architectural details, textures, finishes and colors can be consistently applied to a variety of elements throughout the Project. Care has been given to apply solutions that minimize the visual and auditory impact while maximizing the safety, durability, and maintainability of the project components. The aesthetics palette visually unifies the features with an approach that adheres to the naturalistic qualities of the local vernacular, while reinterpreting them in a modern way.

End Bridge honor and reflect the local historic and

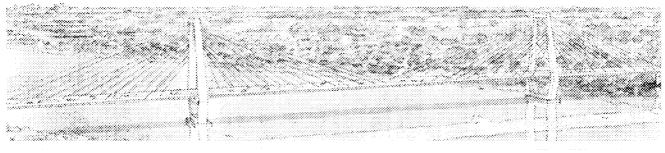


cultural context while remaining as visually transparent and mobtrusive as possible. WVB's aesthetic concept utilizes simple, natural shapes and adjusts the scale, proportion, and repetition in which they appear throughout the bridge to create a cohesive, symbolic structure that has a light impact on the existing landscape. To complement, enhance, and coexist with its natural surroundings, WVB's design for the East End Bridge creates visual transparency through efficient engineering, enabling more slender bridge components which are optimally distributed. The design applies an aesthetic touch to the bridge elements to relate them to the natural landscape so they blend in (e.g., weathering steel, WVB ATC #9, blends with natural limestone).

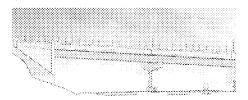
As the largest scale elements of the bridge, the towers, are modeled in reference to an icon of the region; the historic ground hog type lime kiln with its Gothic arch opening. Similarly, the towers of the bridge efficiently serve their main structural function of supporting the roadway while also possessing an understated flair. A gentle convex curve above and below the roadway lends a local style to the diamond shaped towers. Reminiscent of workers entering the lime kiln, drivers on the bridge experience the stacked concrete sections of the towers gradually arching up and over them as they cross the river on their way to work.

The East End Bridge Structure is not just a physical connection between Indiana and Kentucky, but is also WVB's avenue for a seamless, aesthetic connection (Figure 4.2-18).

FIGURE 4.2-18 WYB'S AESTHETIC RENDERING OF THE EAST END BRIDGE



FISORE 4.2-15 THE MAJOR RENTHETIC FEATBRES OF THE ALCMP PROVICE A CONFEX. SENSITIVE SOLETION THAT PRESERVES THE INTEGRITY OF HISTORIC LANDREAPES AND CHARACIER AREAS.



aesthatic between bridges and references natural stone materials. Weathered steel is used per Stakeholders' preference. Pleaster adjustion adds chased styling, masks joints, and accentuates the stake well texturing. Described the texturing preferences area hestoric estates and is a pedestrian-scale enhancement.



STREETS CARE SHIMANCESSION P. Enhanced crosswalks provide traffic calming and pedestrian crossing articulation. Enhanced safety walls become gateway walls into the community. Traditional fence design lies the new intersection streetscape into the rural road character of the surmounding countryside, and belo visually narrows the roadway to help cain traffic.



between Wolf Pan Branch neighborhoods affected by the new highway alignment is improved. Troit head next area along the shared use had provided a stepling point for both local recreational use and for pudestnans and broydists who continue across the East End Bridge.



reating tooking landform that matches the existing area character. The scale of the stoped his condition can be proken up and views improved lowerd the highway from adjacent properties. Use of landform berms and plantings will effectively screen views from historic properties such as Rosswell and Betteriew.



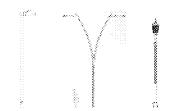
BSTREAMS FIGURES SEE Enhancements reflect the local vernacular forms, covers and textons which helps integrate new structures into the existing visual energineant. Consistently applied concrete lexture and detail using these materials creates a unifying visual assistantic that provides visual linkage between wall and bridge structures along the carridge.



bit DPS PROTECTIONS S. Schill Schill, Adjacent beighborhoods and historical properties an screened from highway views and roadway areas are softened (e.g., on top of hannel portals and rock slopes). The raffuel tandscape is enhanced and impacted historic cultural tandscapes are restored. Trees, shrubs and grasses on new fill slopes and berms provide a permanent solution to slope protection.



the clopes and provide more natural-booking landforms that help screen views from thistoric properties. Plantings restored in this cuthiral landscape are a visually-pleasing amenity along the highway consider Landform and landscape screening helps preserve the character of historic properties impacted by new highway alignment.



STREET CLEARING A TRANSITED STREET STREET Decorative light includes on Wolf Pen Branch Bridge provide a pedestrians coals amenty for pedestrians crisising the bridge between neighborhoods bisected by the highest Dark, natural-toned surface treatments for vertical light posts along the corridor help them blend into the natural color palette of the landscape.



fencing types and was testuring that incorporate the local stone wall versacular. Lendocape plantings enhance covering. Socialwalls along the corridor provide noise indigation and a safety barrier. The evidence trial surface treatment will be the same createsterine testure and onlor used on the bridge structures.



Enhancements reflect the local vernacular forms, octors and textures. Artisana treatment to refine shotchels toding provides formon basic and visual interest. Concrete texture and detail unifies visual another that provides visual intege between wall and bridge chilectures along the corridor.



earth-toned stain colors recreate the color tones of the existing natural and hold relatives in the landscape, formouth textured construct creates refriced visits estations for built elements. Dark position surfaces and elements, ularing with unpainted wealthered steel, heard with the natural surroundings as fewered by the community.



THE SELFORTER THE STATESTS: Using an aribanate treatment to refine the shokerele-facing material, the measive out-nock face of the Tunnel portais will be transformed to a welcoming, human scale entrance and the Tunnel. The arctitectonic took of a constructed stone wall provides a natural transition from the sheet rock wan cuts to man-made Tunnel teature.

## 4.2.1.7 UTBUTY RELOCATION & ADJUSTMENT WORK CLEMENTS

WVB has developed a Utility Master Plan (UMP) that encompasses WVB's approach for utility adjustment work. Mark Hedrick, Utility Manager, manages the UMP and all utility work. Included in this approach is WVB's overall goal to reduce utility relocation and protection work through innovative design and construction measures. We have addressed each of the IFA's concerns:

- # 4.2.1.7.a Utility Adjustment and Interface
- \*\* 4.2,1.7.c Proactive Utility Coordination

WVB has identified and been in constant communication with utility owners including AT&T, City of Jeffersonville Wastewater, Duke Energy, Insight, LG&E, LWC, MSD, and Watson Water Company, to understand the concerns and meet the expectations of the utility owners.

WVB has developed a Utility Matrix to track and review the known and potential utility adjustments and protection items. The matrix began with the IFA-provided list of the adjustments. During the design process, WVB noted additional utility conflicts and adjustments and has worked proactively with IFA and the utility owners to address. The Utility Matrix, a portion of which is included in Figure 4.2-21, is continuously updated throughout construction and Operating Period. Each month the Utility Matrix is provided to the utility owners and IFA as part of WVB's efforts to work with all parties to determine necessary relocations and adjustments.

Based on communication with utility owners, WVB has designed innovations into the Project to avoid utilities and reduce overall exposure to utility adjustments. Design enhancements at the Kentucky Approach Bridge with adjusted pier locations removes conflict with LWC's sludge lagoon. At Wolf Pen Bridge, WVB's design removes a transmission pole conflict, and associated material lead time, allowing early construction commencement. Additional utility technical solutions are included in the figure on the next page.

Restricted and protected zones, such as LWC's WHPA and 60-inch watermain, have been identified, reviewed and discussed with utility owners for proper protection

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measures. Within the WHPA, WVB installs erosion control fencing and earthen berms with liner for the haul roads and laydown yards. WVB has determined alternatives to reduce impacts and has developed a design to avoid the most impactful conflicts. WVB continuously reviews potential utility conflicts to avoid cost and schedule impacts, and negative effects to the public.

During construction, communication with utility owners, IFA and the Department allows WVB to locate utilities using vacuum excavation in order to mitigate relocations (Figure 4.2-20). Further, WVB uses its local experience on past projects to identify local utility firms that WVB has worked with successfully to assist in any utility work.

WVB's construction staging and sequencing approach accounts for utility work that is completed by WVB and by utility owners; we coordinate with the utility owners, IFA and the Department to ensure timely completion of this work, especially those adjustments that might affect our Critical Path Schedule. Our approach ensures that any utility work done by WVB is planned in conjunction with utility owners in order to relocate utilities just once during construction, mitigating cost. Proactive communication with utility owners and IFA allows anticipated completion of a majority of utility work by mid 2014.

#### FIGURE 4.2-20 UTILITY PROTECTION

Ways have experiences with terms stating operations was substantiables and with presention reservant applying sequence expension had politicises



## FIGURE 4.2-23 BILLITY RELUCATION AND ACCUSTMENT WORK ELEMENTS

#### UTILITY AVSIDANCE TECHNICAL SOLUTIONS

- Design required relocation of a utility pole complicating construction, due to long lead time for pole, and traffic phasing
- Gustign citilised for two pier infundations that impacted the studge pand which lies in an environmentally sensitive Wellhead Protection Area
- Permanent Brookhellow 8ndge under SR 265 caused sewer conflicts and environmental impacts (westend / Boodplain)
- Multiple utility partitions to be completed in multiple stages and multiple stage.
   Rik impacts.
- Rédesigned bridge avoids útbity pole, allowing for a single stage construction and reduced anguets to residents
- Redesign of Kenticky Approach, braging the NB and SB braige structures together as a single bridge, and adjusted pier spacing removes the sludge pand adjustment.
- ARC#4 removes the permanent bridge under SR 265 and the utility conflicts associated with 4, and further miligates the environmental impact.
- Enhanced roundahout design reduces eventil hostprint and bridge widenings for reduced utrify adjustments, design also reduces railroad impacts



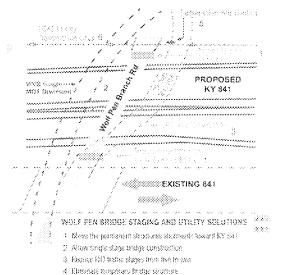
Haid read and Daydowi yard protection measures for the EWC. Welhead Published during posstruction of the Kenasaky Approach Bridge and Main Span Bridge.

#### UTILITY AWARENESS AND PROTECTION

- Existing main has at least three current fractures
- · Stasting activities for tunner adjacent to main
- Loss of watermain would create serious public inconvenience and harm
- Material restrictions
- Access restrictions
- Contamination of well heads in misjor environmental.
   Impact area

through SR 62/8R 265 mierchauge.

- Preconstruction video survey
- . Continuous repetitoring during brasting
- · Post-construction video survey
- . Follow up video survey one year after construction
- Construct berms, liners
- · Haul roads with shot mok and stone caps.
- · Preconstruction meetings with EVVC and IEA.
- · Specific review of design for LWC impacts



\* Reduce impact to traveling public and utilizes.

5. Awaist conflict with transmission into and 24 month stilly adjustment.

ii. Eliminate sheddown of the high demand transmission line.

#### UTILITY MATRIX EXCERPT

				•••••	SECTION 4
LG&E: Ellectric 69 kV Transmission Line	Type 3	Springpale to US 42	08/03/13	62/2014	WVH has had several discussions with LGSE concurring their prelaminary designs at Wolf Pen. Preliminary design does not include lines that are in condict with the noise wall on the lot sade of XYE41 that will be directly under the Bossyn, Preliminary design includes self-supporting pines across Wolf Pen. LGXE took out 16.15-12 800 Volume 3.
MSD: 10 inch Gravity Sanitary Sewer	Type 2	Shadow Wood Sob	09/2013	96/9913	Preliminary design shows that other completion of the new gravity suprary lines to purep station (estimated completion of September 2013), the existing gravity and effluent lines will be held headed on safe keeded. WVB has antitated MSD remembing preterioral melocation.
ATT: Fiber Opsic/Cabinets	Туре 3	Wolf Pen	0.9/2013	8922013	WVB has suppassed AT&1 in regards to the preliminary design that included temporary fixer optic cable relocate on the temporary bidge. WVB redesign of Wolf Pen eliterated temporary bridge and removes temporary relocate.
					SECTION B
Ciuko: Aerial Distribution Linio	Туре 3-	SR 60/SR 26/S/ Port-Road	93/0/016	A108ViO.	Communication has been opened up between W93 and Druke Briefly Referation limiting incorporated into Project schedule. Enhanced mandabout interchange design reduces maintenance of traffic and construction issues with distribution for.
Vechan Gas:10-inch Transmission Line	Type 3	Station 24A+80	837/013	05/0013	WWE has confeded Wacher Gas to planty reposition riseign. Philiminary design instructs to abandon gas main in place. Ventral will install new 30-inch transmission line 26 feet effect from proposed 5R 268.
Level 3: Filter Optic	Type 2	union Selberation	gravania.	09/2013	After discussion with Level 3 Continuoscusion, it has been indicated usbring facilities along Usca Sellerstung Read will be relocated underground in conduit bank along Usca Sellerstung Read

Service and the services of the services

Road Thro SR63

Making County Heap (Book) Pro-

## 4.2.2 DESIGN-BUILD MANAGEMENT APPROACH

The Walsh-VINCI CJV's approach to design-build management is based on full integration of design, construction, and O&M. This gives us greater control to ensure fulfillment of IFA and WVB goals.

WVB's "one team" approach shapes development of the project management organization
and Integrated Management System (IMS) procedures.
WVB's expertise provides a unified approach to design,
construction, and quality control to enable efficient
scheduling of design, construction, and review to
ensure safe, timely Project delivery at all stages.

## 4.2.2.1 ORGANIZATION

The Walsh-VINCI CJV has an efficient organizational structure tailored for the Project, using our experience of safe, on-time delivery of similar projects and understanding of industry best practice. Our project management approach aligns our team structure with our IMS requirements to optimize delivery of all elements of design, construction, and quality control.

## 4.2.2.1 a Preject Management Organization

Section 4.1.1(i) identifies the firms/organizations involved in the Project's design and construction. Brian Hoppel, Construction Manager, leads the Walsh-VINCI CJV and is the single point of contact to the SPV.

### 4.2.2.1 au Dassen Manacereant

Laurent Agostini, Design-Build Coordinator, owns the design delivery process (D3) in the IMS. This process integrates directly with the construction delivery process (D4), as shown in Figure 4.2-22 and described in Table 4.2-10 on the next page. Laurent manages the interfaces between construction and design, working closely with engineering managers and Andrew Brennan, Design Manager. Andrew's responsibilities include:

- Coordinating with Design Section Managers to predict required staffing changes for their teams.
- Liaising with the design staffing coordinator regarding design team hiring/relocation issues.
- Overseeing corridor-wide coordination functions, including the global project CADD platform.
- Managing design subcontracts and allocates subcontractor resources to section teams as needed.

Design Section Managers manage scope, schedule, and budget for design work for their section. Each develop cost estimates for remaining design work for each unit; three-week look-ahead schedules; and accelerate the design schedule as needed.

#### FIGURE 4.2-22 DESIGN DELIVERY PROCESS (03)

- Making WVB's IMS, Design-Build Coordinator, Laureni Agustini, will work closely with Construction (Azenger, Educ Happel, telegiere the Profess.

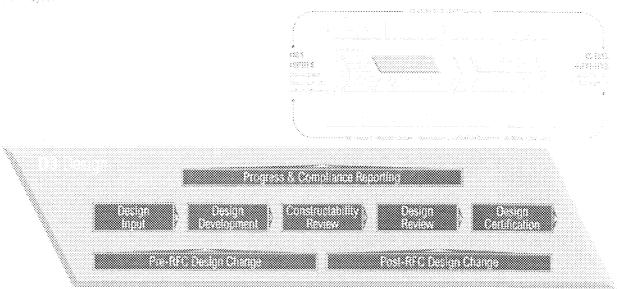


TABLE 4.2-10 PROCESSES COVERED BY THE DESIGN DELIVERY PROCESS (03)

127 16	Prinsed Official	
Design Input	Design Team reviews preliminary designs and design brief to ensure specifications comply with contract and will deliver IFA and stakeholder requirements. Input data include temporary construction constraints.	
Design Development & Construction Review	Design team processes and reviews design input data after interfacing with relevant others. Outputs design deliverables as per the schedule and plan. Engineering team reviews designs from a technical perspective to ensure quality and buildability, with specialist input (e.g., technical, geotechnical and environmental).	
Design Review	DOAM leads WVB's review process to enable designs to be issued for Stage 1, 2 and RFC approval. Independent design checkers review and challenge bridge and Tundel designs. IFA reviews phases.	
Design Certification	DOAM confirms each design deliverable produces executed works that comply fully with project requirements/design inputs.	
Pre-RFC Design Change	Design Manager oversees a structured change management process to ensure design changes needed (e.g., to improve buildability are recorded, managed, approved and costed appropriately).	
Post-RFC Design Change	Engineering Manager ensures changes at this stage (to respond to non-conformances, environmental incidents, etc.) are recorded, managed, approved and cost appropriately.	
Design Interface Management	Design-Build Coordinator ensures all interfaces are identified and continuous engagement conducted to keep stakeholders informed and take on board feedback. This will include the integrating issues discussed below.	
Progress & Compliance Reporting	The Design Build Coordinator will report on design/engineering progress and performance as well as major issues to the CJV Executive Committee for decision making.	

input from several corridor-wide functions to ensure Project and stakeholder requirements integrate with:

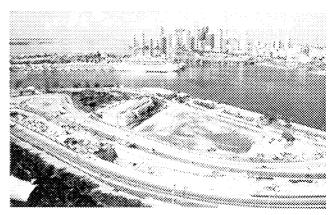
- Right-of-Way Coordination: Although not anticipated, the ROW Coordinator notifies the team of any right-of-way acquisition changes to the design process so schedule impacts can be mitigated.
- \* Utilities: Mark Hedrick, Project Utilities Manager, provides routine updates on the status of utility adjustments. Mark arranges utility agreements and liaises during the design development.
- Survey: WVB's survey team, led by our Chief Surveyor, liaise with the design and engineering teams to incorporate results into design development.
- Community Relations: Dan Hartlage, Public Information Coordinator, leads external consultation and communication. He and the design team consult stakeholders and ensure feedback is used in design development.
- Environmental Permitting: Gina Morris, Environmental Compliance Manager, supports a review of environmental permits, commitments, and requirements. Gina also assesses sustainability risks and ensures designs incorporate measures for compliance during construction and the Operating Period.

## 4.2.2.1.a.8 Design Dalivery

BESIGN RESOURCES. WVB works with local and international design experts to deliver the Project safely, on-time, and in line with IFA quality requirements. Mobilization of the design team begins at Notice of Award. To identify design staff requirements, we integrated the design schedule into the overall schedule and developed a staffing curve. We estimate a peak design staff of 150 professionals six months after mobilization. To meet staffing requirements, Jacobs partners with disadvantaged businesses.

#### DESIGN COORDINATION

the WVA testign feares has proved Reprofestion schemistics from PPP project's like Goldan Ears, Confederation Anoge (4): Port of Missai Tonnel



Manager, leads the design team, and manages and coordinates subconsultants. WVB strategically selected local design team offices to:

TABLE 4.2-11 PROPOSED MAJOR DESIGN

Utica, IN Project Office	Design-Build Coordination     Quality Assurance Management     Post-RFC Design Coordination     IFA Review Phase Goordination
St. Louis, MO Indianapolis, IN Primary Design and Production Facility	<ul> <li>Corridor Wide Integration</li> <li>Segment 4 &amp; 5 Production Centers</li> <li>Segment 6 Production Center (Indiana)</li> <li>Design Team Cost and Schedule</li> <li>Controls</li> <li>CAOD Production Management</li> <li>Design Document Management</li> <li>Resource Support</li> </ul>

- Provide the required design functions at the project office as per the technical specifications.
- Locate all project-wide coordination and production functions in a central primary facility.
- Create cost-effective major support centers where larger staffs are available.
- Harness specialty technical expertise from other contributing locations.

**Table 4.2-11** describes proposed locations. To minimize travel, WVB utilizes tele-, web- and video- conferencing capabilities at all design locations.

TESEY AND SEALTY. WVB first communicates our single, uniform approach to design management to ensure consistency throughout design development. We agree on: design schedule, required formats for drawings and data, design review and approval protocol, and key contacts. Details are agreed to at initial workshops and captured in the Project Management Plan, Project Criteria Document (setting the baseline design criteria) and Design Quality Management Plan.

WVB requires all design team members to use common design and communication tools. DyMaDoe provides authorized parties access to Project documentation

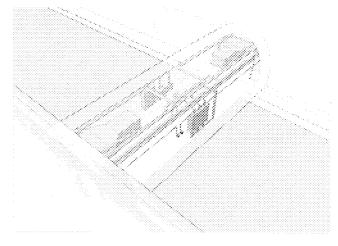
and drawings. Document change alerts are sent to relevant personnel to ensure the correct data is used. We use a Project-specific workspace environment in MicroStation to distribute to all offices, including subcontractors. This standardizes, for example, fibraries, symbols, and colors for consistent plans.

IDENTIFICATION OF PRYSICAL INTERFACES & DESIGN INTERFACES. A vital stage in the design process is the identification of critical physical interfaces between the various elements of the design. Once design team and subcontractors are appointed, WVB holds a workshop to identify all physical interfaces and prioritize associated areas. Early design has begun to identify areas of congestion within the schedules. Where this is more challenging or a serious risk to constructability, a more in-depth review is carried out.

For example, at the Tunnel utility cross passages WVB uses VINCL CGP's program, ARMA 3D°, to provide 3D/4D visualization of the complex utility placement from different disciplines within small cross-passage corridors: electrical, fire suppression, detection, and ventilation (Figure 4.2-23).

#### FIGURE 4.2-23 30/40 VISUALIZATIONS

WV8 Design fears has constitled 31940 measuring of many key areas including Talled mass-reassing to resolve utility therefores.



4.2.2.1.8 HITERRAL CROADIZATION SYSTEMS

WVB's project organization systems enable full design and construction integration. We have an efficient management and delivery team that expedites communications and enhance the decision-making process to increase the value of the Project for IFA. Clear control lines and communication ensure the highest quality.

Otrect Reports: Project Controls Manager; Site Manager and Bridge Construction Manager; Administration Manager; Contracts Manager

#### Benefits of this Organization:

- Accurate reporting and informed decision making
- Integration of buildability, scheduling, economics and site constraints
- Admin, support and best use of staff/labor resources
- Can champion the contract with SPV and subcontractors

# 

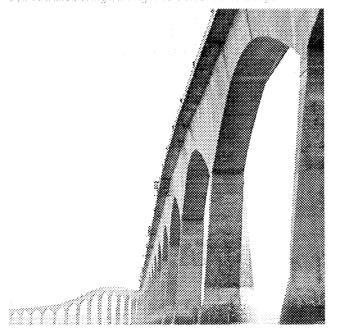
Direct Reports: Design-Build Coordinator; Logistics & Equipment Manager; Section 4 Project Manager (PM); Section 5 PM; Section 6 PM; Mechanical, Electrical and ITS Manager

### Benefits of this Organization:

- Integrates site engineering with main and subcontract designs for efficient management of post-RFC changes
- Central service function streamlines equipment use and PPM scheduling for optimal safety and productivity
- Focused ownership of construction, scheduling, designbuild coordination, works preparation and execution
- . Section PMs own budget, time, quality and salety
- · Coordinates with Q&M and utilities

## DESIGN-RULLD COORDINATION

Perma Marcani secoveristly represent and exceptionist with VVVB design partners att and Gockland & Cytel the Confederation Bridge, he eight aste prestressed bridge.



efficient work, issue identification, and resolution throughout construction.

By dividing the works into three sections based on geography and construction activities, Section Project Managers have autonomy to control a particular area. This autonomy improves response to local and task-specific commitments, requirements and concerns. Although divided, all works are delivered consistently, in line with our single IMS.

### 4.2.1 tall Construction Management and Interesting

Brian Hoppel, Construction Manager, leads the entire design-build delivery of the Project. Site Manager and Bridge Construction Manager, Pierre Morand, reports to Brian and directs the Design-Build Coordinator and Section Project Managers.

As the Project is divided into three geographic areas, we organized the management team based on this division:

- Section 4 Kentucky Approach
- Section 5 − East End Bridge
- Section 6 Indiana Approach

A Section Project Manager controls each section and all aspects of design and construction for that section. Geographic division of works facilitates management of environmental requirements and constraints, local stakeholders and interfaces. For each part (Tunnel, bridge, and roadway in both Sections 4 and 6), there is a dedicated Design-Build Coordinator. Individual Design-Build Coordinators for each of these portions ensures knowledge sharing and minimizes duplication. Section Design-Build Coordinators report to the Design-Build Coordinator, Laurent Agostini, who coordinates communication between sections during design and construction.

Design-Build Coordinators work with the Engineering Manager to support Laurent with management of design efforts and schedule assessment, interface, and constructability constraints. Design-Build Coordinators work closely with area-wide managers, such as Mark Hedrick, Project Utilities Manager, and Mark Fournier, MOT Manager, to support design development and review. Design-Build Coordinators are involved in both design and construction, and ensure construction requirements are considered during design

and design is understood in construction. **Table 4.2-12** provides specific physical interfaces that require design coordination.

Within each section, crews report to a Foreman, who in turn reports to a Superintendent, Multiple Superintendents report to each Section Project Manager, Regular two-way communication is maintained between all supervisors and reporting personnel to provide clear instruction and promote quality, productivity, safety, and sustainability, and to receive feedback. Field Engineers support related engineering and project controls activity, including monitoring and measuring to support reporting of key performance indicators. WVB's reporting structure is illustrated in Figure 4.1-5 in Section 4.1.1.a.ii.

2.2.1 to United Ossgo, Construction.
 3. Quality Approach

WVB is committed to collaborating with IFA to deliver the Project safely and responsibly, on schedule and within budget. Our Project Management Plan (PMP) sets out the delivery approach applied through design, construction, and the Operating Period. The PMP describes the management systems and procedures in our IMS, which incorporates our quality management system. The IMS applies at all stages, and everyone working with WVB is required to comply.

WVB applies a single governance approach and a consistent decision making process. Decision making and quality assurance are supported by inspection, measuring and reporting by our independent quality team. The quality team independently ensures the objective review and approval of all aspects of delivery.

WVB trains to ensure team awareness of quality requirements. Common induction training is provided to employees and supply chain personnel on our project management approach, individual responsibilities, site



rules and specific quality messages. Focused training is provided to design team for design quality and environmental requirements.

collaborative pagesesses apparative Early on, WVB and client senior managers define the project vision, values and objectives. We create and sign a project charter based on our vision, values and objectives.

An initial design workshop introduces design team members to the Project charter. Initial launch workshops for construction and O&M workforces reinforce WVB's vision, values, and objectives. We ask team members to sign the Project charter. Project induction training and regular briefings further communicate our approach. Additionally, regular social events are held to celebrate achievements and build lasting relationships within our team.

#### PARTNERING

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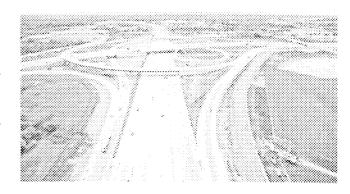


TABLE 4.2-12 PHYSICAL INTERFACES AND DESIGN INTERRATION

Cable Stay Anchorage Point	Bridge structural engineer, cable stay supplier for anchor heads, pylon anchor box, D8 coordination	High density of reinforcement around anchorage point, requires suitable space for tensioning and inspection.
Tower Lower Strut	Bridge structural engineer, form work manufecturer, bridge superintendent, DB coordination	High density of reinforcement and coordinated form work design for constructability.
Tunnel Cross Passage Utilities	MEP coordinator, lead Tunnel engineer, mechanical engineer, component manufacturers, DB coordination	Multiple utility lines running through cross passage.

## 4,2,2,2 98868/8960 BASCLEBS SCHEDULE

In developing our Project design-build schedule, WVB considered all elements of the work, related requirements and constraints, resource availability, risks, and construction best practices to optimize safe and efficient delivery.

## 4.2.2.2.s Schedule Methodology

The Project CPM schedule incorporates thousands of activities, including many to be completed by subcontractors. The CPM accounts for and tracks all aspects of the Project including design, fabrication, and construction activities.

## 4.2 il.2.x E Scredder Preparation, Control & Update

WVB's approach to preparing the design-build schedule, as presented in Section 4.1.4, is based on a refined design approvals process and proven construction output rates. The schedule narrative and preliminary P6 schedule is provided in Volume 2 Appendices.

WVB's design approval methodology, as shown in Figure 4.2-24, optimizes design progression by coordinating subsequent Stages during the IFA approval periods. This provides a streamlined approval process for effective construction progress. WVB



collectively reviewed and agreed upon proposed methods, sequences, and proven production rates to provide a swift and efficient schedule that allows for substantial completion by October 31, 2016.

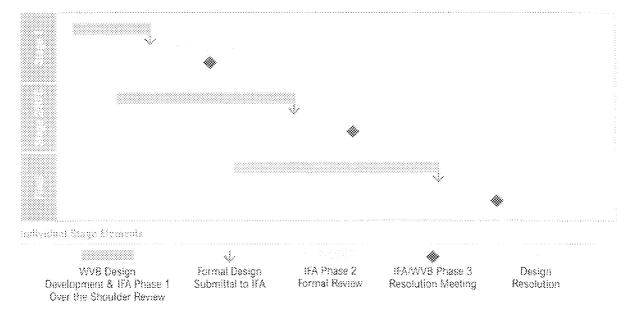
The WVB Design Team reviews progress on the design schedule on a monthly basis. This review identifies risk factors or opportunities previously unforeseen, and formulates solutions. Critical and near-critical activities are closely monitored throughout the design phase of the Project. Earned Value reports provide the design team leaders the information needed to manage their teams, and to brief the project management team on progress.

WVB's structured control and update system for scheduling this Project includes:

- Three-week look-ahead schedule produced weekly and reviewed by the design-build team.
- Project team meetings twice per month to compare the progress of the past two weeks against the previous schedule and update as necessary.

#### FIGURE 4,2-24 DESIGN APPROVAL PROCESS

Vevo's design approved process rumerally bondates ancres how 40% three places review process will be viscoparate one as three cases of the design process.



Meeting minutes produced by the Project Scheduler and included as part of the encompassing monthly update provided to the IFA.

### 4,3,3,0,s,8, Work Speak town Saratours (WSS)

Iterations of alternative Work Breakdown Structures (WBS) were developed and reviewed to determine a fitting preliminary outline that accurately reflects the entire Project's scope and provides a sensible and accurate tool for planning through completion.

WVB Schedule Manager, Scott Singleton, has developed a detailed WBS in line with INDOT procedures for all activities including:

- « Contract Administration (meeting financial close, satisfying NTP requirements, commencement of construction).
- Section 4 Kentucky Approach (design and MOT phasing, Tunnel/roadway/bridge construction).
- Section 5 East End Bridge (design, foundations, towers, superstructure, erection sequence, finishes).
- Section 6 Indiana Approach (design and MOT phasing, roadway/bridge construction).

#### A BULZ ous Pasagivinnig Surecommusi Astronom

WVB consults with key material providers and subcontractors to create and agree to the overall baseline schedule. The schedule includes a large collection of activities for Project procurement, including fabrication times for key items such as bridge bearings and beams, post-tensioning materials, Tunnel equipment, MSE walls, and overhead sign structures.

WVB works closely with all suppliers to ensure they have the capability and capacity to meet the requirements of the agreed construction schedule. WVB tracks supplier fabrication schedules and frequently visits fabrication shops. On-site subcontractors attend the twice-monthly Project team meetings and contribute to the schedule review to make modifications to the schedule where necessary. This is then applied to the development of our detailed three-week look-ahead schedules throughout the course of the Project to ensure all parties remain focused on predictability of Project delivery.

4.2.2 fla.iv. Massaging Resources & Activities

WVB has based our schedule on productivity rates from our member's global portfolio of delivered projects. Once on site, we consider each element of construction separately to further optimize activities to reflect durations based on final quantities and demonstrated production rates.

WVB's project controls team, as part of WVB's C1 Strategy and Project Control Process, will drive our continuous improvement efforts. This effort focuses on optimizing our processes, identifying and implementing innovations, and adopting collaborative work practices to achieve improved delivery time.

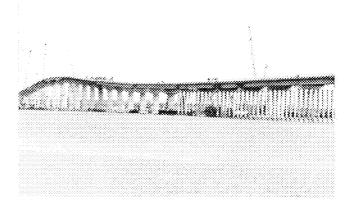
WVB's approach ensures we meet and potentially improve our milestone dates. The following resource options for schedule recovery have also been considered:

- WVB's Tunnel excavation schedule is based upon three shifts working five days. Excavation on a sixth day provides a 17 percent production increase.
- The East End Bridge schedule is based upon one shift working five 10-hour days. Added shifts and extended hours offer multiple recovery options.

Every project introduces challenges that intermany rupt the planned schedule. Whether it requires alternative design solutions, additional equipment, extended labor shifts, or an increase in subcontracted activities. WVB has the local and global resources and experience to deliver the Project more effectively than any other team.

#### DESIGN-BUILD SCHEDULE SUCCESS

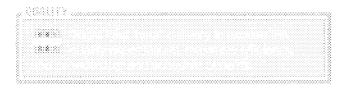
WVB com design-build coordination to complete projects with appreciate schoolers, mich as the US 90 triage every Bay St. Louis, which won AASNTO schoolers were in 200s.



## 4.2.3 DESIGN-BUILD QUALITY MANAGEMENT

WVB is committed to delivering a quality end product for IFA and providing assurance throughout all stages of Project delivery to confirm this commitment. Our Design-Build Quality Management approach is founded both on our use of knowledgeable personnel with relevant experience, and our commitment to achieving "Right First Time" delivery. As well as enabling us to exceed IFA quality expectations, our approach maximizes efficiency in delivery, bringing significant cost and schedule benefits.

In defining clear processes for the production and checking of design deliverables, WVB clarifies roles and responsibilities for team members and establishes all lines of communication and reporting from the Project outset to ensure smooth operations during delivery. High quality designs are produced efficiently, incorporating the full input of all relevant parties, and are approved in time for safe, responsible construction to begin on schedule.



## 4.2.3.A DESIGN CUALITY

The first step in this process is to identify all design deliverables required for the Project. Each is uniquely numbered and the relevant approval requirements and timings calculated so they can be incorporated into a Project design deliverables schedule. This aligns with the overall Project schedule to ensure designs are completed and approved in time for construction to begin as planned.

Design team members produce deliverables according to an agreed plan and common set of procedures. This determines the format in which drawings are to be produced and provides templates for related documents to ensure these record all necessary information. It also established the route each deliverable must take to ensure distribution and approval in fine with WVB and IFA requirements.

BUR INTERNAL PROCESS FOR BESIGN SEMENTS: Throughout the design process, all calculations, analyses, models, and drawings are checked according to the procedure and requirements set out in our Design Quality Control Plan. This plan, developed by our Lead Engineer, Marcos Loizias, specifies the type and frequency of checks and assigns competent design checkers. Checks are performed by qualified engineers not involved in originating the work to ensure objectivity in checking and challenging the designs provided.

WVB performs independent design checks for the main span bridge and Tunnel items, using qualified engineers who are independent of the design team. These independent checks are in addition to the typical design quality control procedures. The WVB O&M Team is included in the design process to provide input for materials and details that optimize the durability and maintainability of the Project.

Initial designs go through a series of internal WVB reviews including constructability, safety, cost and schedule control, material selection, and sustainability concerns. Bruce Peterson, Design Quality Assurance Manager (DQAM), then reviews the package from both the design quality control checking process and internal reviews. He confirms compliance with our overall Project Quality Control Plan as well as the PPA requirements to ensure designs lead to client satisfaction in construction, operation, and maintenance of the end product.

THREE STAGE REVIEW PROCESS: The Incomical Provisions togethy a three stage design before process nomprising Stage 1, Stage 2, and Final Stage reviews.

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PHASE 2: Toronti submittel of the design to doctor remostite distribution for the librarial ICA review strongers are remosed to the Philippoint and will be ugreed at the Design tales Off manning.

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In order to meet the overall Project schedule requirements, certain construction activities need to start before the applicable design unit has completed the Final Stage of the design process. For these activities, including main bridge foundation and Tunnel south portal walls among others, specific early release RFP reviews are added to the review process. The DQAM submits these items for RFC approval with a certification that the design and quality process has been sufficient to enable the construction of the selected items of work identified in the relevant RFC package.

#### BEAUTY ASSESSED AND BRAUTY CONTROL PRECIDENS.

WVB's Quality Assurance and Quality Control functions are described in Section 4.1.5 and detailed in preliminary PMP in the Volume 2 Appendices. WVB's DQAM, Bruce Peterson, is responsible for adherence to the design deliverable quality assurance processes, taking accurate input data into account, and maintaining all necessary records.

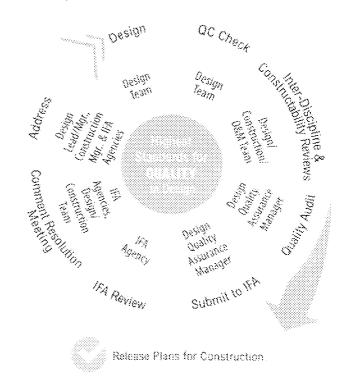
IFA and Department via the Phase 1 over the shoulder reviews throughout the design development and approval process to ensure incorporation of all objectives and to provide status on the up-to-date progress on developing the designs ready for construction, IFA's participation in these reviews is vital to allow us to address any design-related issues proactively and expedite the formal review process. The IFA and Department are involved in approving and signing off designs as part of the Phase 2 and 3 reviews.

Design Team structure, including reporting relationships, is shown in the organization chart in the Volume 2 Appendices PMP. As this illustrates, Bruce reports directly to our Project Quality Manager, Martine Julia-Sanchez. He focuses exclusively on the Design Quality Process independent of the Design Manager and the Lead Engineer.

#### INDIARO DEPARENTENT ENTENDOSE PRECEDENTES TO SE ISAPES.

Schedule in the Design Quality Plan to control and monitor compliance with oversight procedures. For each design unit, this Plan identifies related design documents to be prepared and submitted for review at each stage of development, including IFA design reviews. Completion of the Plan and associated schedule provides assurance that all required quality control activities have been delivered. The requirements set

#### DESIGN QUALITY PROCESS SUMMARY

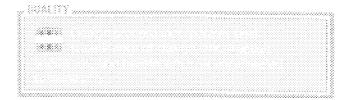


out in the Plan are discussed and communicated to all Design Team members via an initial design workshop, scheduled to take place within 30 days of NTP1.

## CONFORMANCE WITH FEDERAL OVERSIONS REQUIREMENTS:

Walsh-VINCI CJV's design complies with FHWA guidelines and is not expected to require any additional design exceptions other than those previously noted by IFA. We continue to work with FHWA to ensure the final design meets all requirements and Federal safety standards. The current design meets all NEPA commitments and Walsh-VINCI CJV will coordinate with INDOT/KYTC to ensure the final design meets all requirements and commitments.

baselistism across and the same series. After Bruce has verified that all internal reviews have been completed for a design package, he prepares a certification of the package for submission to the IFA. For each submission, a complete package is placed in the online



DyMaDoc document control system, including all design quality control, internal review and quality assurance documentation.

sign deficiencies identified are recorded by Bruce and communicated to the relevant members of the Design Team. Bruce creates a register of design deficiencies to review, track, and report on our progress of resolving these issues.

Any design changes are recorded and communicated to all relevant members of the Design Team to ensure incorporation in all drawings and future design development.

#### ALZIGUS CONSTRUCTION GUALITY

Implementation of Walsh-VINCI CJV's Design-Build Quality Management Plan ensures construction is in compliance with approved designs and specifications resulting in a high quality end product.

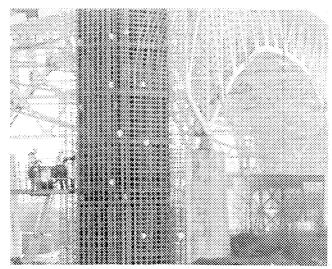
specification of the Design Units (DUs), our experienced construction personnel interact with our design team to support development of material provisions, equipment installation requirements, construction tolerances, inspection and test standards, and acceptance criteria that meet or exceed IFA's specifications. Constructability reviews are carried out on each DU to ensure we achieve safe, efficient delivery of a high-quality end product.

WVB's Project IMS, incorporating our QMS, applies during design and construction. This includes common procedures for: document management; non-conformance/deficient design and build control; submittal and RFI; and communication and reporting. This facilitates quality control and ensures reporting consistency, making it easier to assess our ongoing quality performance.

of source materials is documented per IFA standards. Where possible, the selection of pre-qualified suppliers ensures materials are sourced from firms that have demonstrated their capacity and capability to uphold the Department's quality requirements. Records demonstrating the control of materials include Certified Material Test Reports and the results of physical

#### INSPECTIONS

With provide details for indprotons use to field chunks maker inspitation in Cleveland Inderbeit, Water Constructions,



material sample testing. Physical inspections and tests occur during in-process construction activities. All such records and results are managed via our secure online DyMaDoc document control system and also entered into IFA's requirement verification database application.

ops and implements a standard reporting discipline to ensure all results, records, and reports comply with common reporting parameters. This includes recording task-specific details, location, work element, workforce and supervision accountability; identification of incorporated material; major equipment use; inspection and test results; and the conditions under which construction was carried out. Quality performance is reported in IFA-approved formats and WVB provides report templates to ensure consistency and facilitate interpretation of results. Records provided include daily reports, schedules, work plans, ITPs (including mandatory hold points), witness points with signoffs, and quality results summaries.

All reporting is content driven, formatted, and approved by IFA authorities. This includes electronic meta data file structure and files. DyMaDoc is used for all document control and management including (but not limited to) quality records, drawings and specifications (see Section 4.1.7). WVB uses IFA's requirement verification database to review and respond to observations made during IFA quality oversight activities.

ACCEPTANCE TESTING, INSPECTION AND MANUFORMS OF CON-STRUCTUM Acceptance testing and inspection activities to be completed during construction are defined in inspection and test plans (ITPs) attached to method statements, ITPs typically include:

- Inspection type activity (hold point, witness point)
- Frequency of inspection
- Criteria of acceptance
- Responsibilities
- \* Records

Construction monitoring (Table 4.2-13) is primarily the responsibility of QC staff, but every member of our trained and empowered workforce is mindful of safe work practices and required quality standards.

#### TABLE 4.2-13 CONSTRUCTION MONITORING

Competent Project workforce responsible for Right First Time delivery
Quality control professionals (directed by Construction Quality Control Manager, John Reid)
Quality assurance personnel (directed by Construction Quality Manager, Courtney Norris)
Independent personnel (directed by Quality and HSE Manager, Martine Julia-Sanchez)
IFA / Department personnel

connective across WVB is committed to right first time delivery and the use of quality planning, control and continuous improvement methodologies to achieve 'no surprises' during execution. This approach relies on our disciplined development of work plans; application of best practice quality control processes; and commitment to a philosophy of continuous improvement. Sustainable improvement is strengthened by quality assurance audits, management reviews of quality system results and the implementation of our strict non-conformance/corrective action (NCR/CA) procedure.

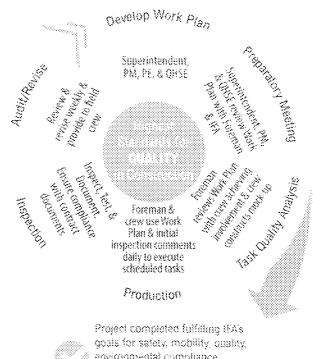
WVB's NCR/CA procedure requires anyone identifying non-conforming or deficient work or products to report this immediately for investigation and correction. A Corrective Action Plan is developed, implemented



and monitored to ensure effectiveness in each case. NCRs are documented in CMiC and our EDMS. This allows our quality team to review results and identify any trends that warrant preventive actions to be introduced. Lessons learned are developed for sharing with IFA and throughout WVB supporting continuous improvement.

100 000 000000000000 1000100000000 IFA and the Department are notified in advance of all proposed construction quality activities. We achieve this through regularly scheduled coordination meetings, look-ahead schedules, formal IFA-WVB quality meetings and direct communication with appropriate IFA personnel IFA approval is obtained before any construction activity can proceed from a mandatory hold/witness point.

#### CONSTRUCTION QUALITY PROCESS SUMMARY





environmental compliance. budget, and schedule.

## EXHIBIT 2-G

## **OPERATIONS AND MAINTENANCE PLAN**

[attached]

# 4.3 Operations and Maintenance Plan

WVB's East End Partners' (WVB) Operations and Maintenance (O&M) main objective for the East End Crossing is to safely provide a high quality rapid response service and maintain the roadway with reduced disruption to the traveling public.

To achieve this objective, WVB commits to self-perform more than 30% of the O&M work of the East End Crossing Project (Project). Combining the know-how and experience of our equity owners, we have a vertically integrated approach to provide efficient and safe O&M.

WVB, led by Project Manager David Sikorski, brings extensive experience from the O&M of similar roadways and facilities around the world with shareholders currently operating over 3.300 miles of roadway systems including four cable stay bridges, summarized in Table 4.3-1. Vincent Meyer, our Team's O&M Manager served as maintenance manager of 620 miles of highway on the ASF Network, from 2008 to 2011.

WVB's international expertise is reinforced by our knowledge of the local area provided by Walsh Investors of Chicago. The integrated approach fosters project innovation and optimization to support efficient and safe O&M. WVB's approach utilizes local

One Teach, One Project, One Community

Prin symbol highlights value added team

Faceghos the decement.

Indiana contractors, including Walsh Construction, to complete major maintenance and rehabilitation work.

with our vertical integration, gives WVB an in-depth understanding of the relationship between capital and operational expenditure for such facilities, as well as the importance of maintainability and access. The O&M Team has been involved throughout the bid in design development to ensure technical proposals for the Project include innovative O&M solutions, see Figure 4.3-1. Our solutions provide best value for money for IFA by reducing capital and rehabilitation costs, and further reducing costs beyond the Operating Period.

The WVB Team commits to provide excellent customer service for the traveling public throughout the operational life of the Project. WVB's O&M quality management procedure ensures that, by contract termination, we meet, and wherever possible exceed, all IFA Performance and Handback Requirements.

## TABLE 4.3-1 SUMMARY OF SIMILAR PROJECTS UNDER WVB SHAREHOLDER OPERATIONS AND MAINTENANCE

Cofiroute Network, France	750 miles of highway	1970
SR 91, California, USA	20 lane-miles of managed lanes	1995
ASF Network, France	620 miles of highway	1957
Tagus Bridge, Portugal	7.7 mile crossing with cable-stayed bridge	1998
Severn River Bridge, UK	3.1 mile crossing with cable-stayed bridge	1996
Rion-Antirion Bridge, Greece	1.8 mile crossing with cable-stayed bridge	2004
Confederation Bridge, Canada	8.1 miles with highway and bridge	1997
Kicking Horse Pass, Canada	16 miles with highway and bridge	2007
A1 Motorway, Germany	45.5 miles with highway and bridge	2012
North West Anthony Henday Drive, Canada	13 miles with highway and bridge	2001
Golden Ears Bridge, Canada	8 mile highway with 3.175 foot long cable-stayed bridge	2006

#### FIGURE 4.3-1 DESIGN TECHNICAL SOLUTIONS PROVIDED BY MYS TO OPTIMIZE FUTURE MAINTENANCE жы Түрлердей оруулу age, 58,735 emen in mark side beginne And drames allowed Wedf Physical Inflations Stife?? Ecopone hinkbast Richts Basyonalbakelasi Suntana 6 Estadalene SE ik sveden av Bojda si Klasset, Greje Gjerit Re-dos profitos por volta and appropriate additionation Best Jamp Hurts, wat 88 sch Southeast Agreements Children + 0.8 Federatorical contenting triangle AND DESCRIPTION OF COLUMN a promisi norskomes na lance Miperalis Salestoraph réfrégérésse elakosik jord, korčila (g Place to Coles Interes Introduction the recovery section is a section. - 168-006-00e (transfers of those convenes a didea that the stigled sept assess. Ò 7902884848933 HV WORLDON SCHOOL OF THE WARRENCE STEELS WITH 4366 3234-FH-198396-65-68-68-688 PMC FOR RESIDENCE PROPERTY. 34 étaPSY redestion en présentat préférée. 23 dist, SV reducation betrings falls, has been been Ida was hatter regulative billetischen. Zintiki doudiji islama bisari araptiu: ¿pakuditant ges distributions ASS ANCESS - desir kalakung suratu ar mais s – Partirated court control one ्रमें विकास का का कार्य में बेट होती? seed Cleaner St. PAVERSEN I: Seek COSPARING DR 4800000 awa, TERRETORIE SIG BYS BYTENCHUR (Sci sem letter diables signification was se year destroy the AND TORA DEEX ORPHACEMENT Boss protestiva for surpaints and Leaffa eta leta destrución de come Esta Machar de el Producto Patideox reptacescent barest en Serta tra gydagetatypas Lower performances. construction of each Signal(sias sepecial registroscept and) na days on PA radulaçãos a pria basam escalpar Sector His. (1: Polistic Parkers Area Parcel 25 -- W A: (haderhad Maintenance Uneil 31 Operations & Starttenance Historia 4 Cesemed Material Sturnes facility S. Matti-Hos Party Breek Spittom Hamp SER to EB 82 785 - 🕸 Palatina - 💆 Old - 🐿 Samaral Delay Louis and - 🐯 Samaral Samaran

#### A.3.4 OPERATIONS AND MAINTENANCE TECHNICAL SOLUTIONS

The WVB O&M Team has innovative, best practice O&M technical solutions to maintain safe, continued use of the Project by the traveling public throughout the Project's operational lifecycle. These include measures to ensure safe, cost effective routine maintenance activities; and well managed scheduling and delivery of necessary rebabilitation works.

Maintenance is managed according to delivery process D6 within the Project Integrated Management system (IMS) as shown in **Figure 4.3-2**. The IMS is described in Section 4.1.1 and provides a consistent approach to delivery, quality management and reporting in all Project stages.

#### ali, 1, 1 koadwiy and Bridge Operations

The WVB O&M Team is responsible for Operation Patrolling on the Project, and the Incident and Emergency Response within the O&M Limits. Incident detection and response is fast, efficient and precise to ensure safe use of the roadway and bridge. The WVB O&M Team understands the local context, including interaction and interface with local authorities, public information provision and the auticipation and management of potential hazardous situations.

# FIGURE 4.3-2 OPERATIONS AND MANAGEMENT PROCESS, DG, WHICH WILL BE

THE O&M MANAGER

MANAGED BY VINCENT MEYER,



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#### 1.3.5.1.a Policing the Roadway and Bridge

The WVB O&M Team's priority is safe passage for the traveling public and WVB, INDOT and KYTC staff. During the Operating Period, we patrol the roadway and bridge 24 hours a day, seven days a week. The WVB O&M Team uses two customized patrol vehicles dedicated to the Project. The Team has equipment such as movable flashing arrows and crash attenuator trucks for safer traffic management during incidents or maintenance activities.

The WVB O&M Team will develop an O&M Plan that details all operation procedures. This aligns closely with our Project Safety Plan, detailed in 4.1.6.b and Section 22.1.7 of the Technical Provisions.

BETECTION OF EMERGENCIES: The WVB O&M Team has access to many sources of information to promptly detect and respond to incidents:

- \*\* The bridge structural health monitoring system
- WVB O&M Team roadway and bridge patrols
- Weather forecast monitoring
- The ITS, operated by INDOT and KYTC.

Figure 4.3-3. Upon notice of an event, the WVB O&M Team follows the incident detection and response plan shown in Figure 4.3-3. Upon notice of an event, the WVB O&M Team immediately informs the Department's Traffic Management Center in Indiana and the TRIMARC Traffic Operations Center in Kentucky (collectively known as the TMCs).

After incident detection, WVB's O&M Team proceeds to the site to secure it and provide immediate assistance. With patrollers posted either at the O&M Building or working on the Project, response time is less than an hour. WVB O&M Team managers are on call, if needed to assist in incident management.

WVB O&M Team's focus is to keep the traveling public, adjacent landowners and all project staff safe. Team members use customized traffic control equipment and vehicles to secure the site. Quick installation of proper temporary traffic management measures will reduce impacts of an Incident, including secondary crashes and excessive traffic delays. The O&M Plan will detail the procedure for Incident Traffic Management, with the appropriate layout of the safety devices, according to the Manual on Uniform Traffic Control Devices (MUTCD) and checklist of actions to implement.

All measures necessary to move the Incident off the traveled roadway are carried out as soon as safely possible and at the direction of the emergency responders.

The WVB O&M Team will reopen the roadway within 25 minutes of clearing any Incident.

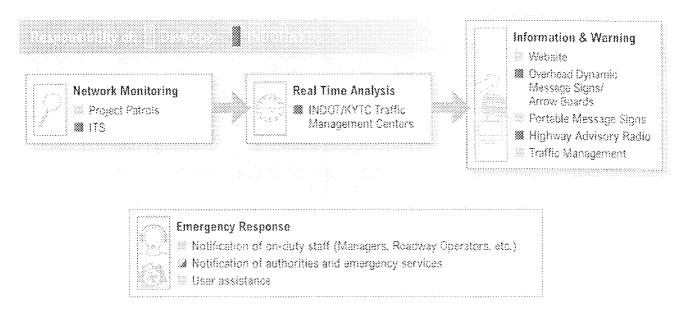
KEEPING THE THEO AND USERS DEFINED. The WVB O&M Team immediately informs and continuously updates the TMCs of any Incident, its impact on traffic, response actions undertaken, the restoration of traffic and any related information.

Once informed by the WVB O&M Team or the ITS, the two TMCs alect users to the presence of any Incident using Dynamic Message Signs (DMSs). Lane Control Signals and the Highway Advisory Radio. The WVB O&M Team uses the latest technologies and social media, such as Twitter, Facebook and email to inform users. This combined approach helps minimize impacts of Incidents and maintain good public relations.

#### 4.3.1.1.b. Coombission with Emergency Service Providers

Prior to the Operating Period, the WVB O&M Team coordinates with INDOT. KYTC, appropriate emergency service providers, law enforcement agencies and relevant private sector responders (e.g. towing and hazardous materials contractors) to develop a Project Emergency Plan. This plan details WVB O&M Team actions in case of emergency and establishes lines of communication with emergency responders.

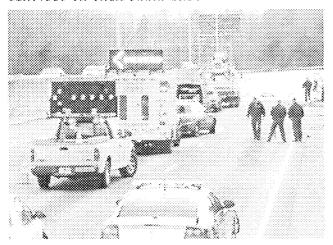
FIGURE 4.3-3 WVB 0&M TEAM DETECTION AND RESPONSE PROCESS



In an emergency, the WVB O&M Team informs the appropriate authorities and implements the Project Emergency Plan. A WVB O&M Team roadway patroller and crash attenuator truck are dispatched to ensure the safety of the site and the traveling public. Once the emergency responders arrive on site, they take the lead. The WVB O&M Team will continue to provide traffic management at the direction of the emergency responders.

WVB has experience throughout the world working with emergency services, as shown in **Figure 4.3-4**.

## FIGURE 4.3-4 COORDINATION WITH EMERGENCY SERVICES ON CALIFORNIA-SR91



The WVB O&M Team participates in quarterly traffic incident management team meetings led by INDOT. The Emergency Plan is updated to account for feedback and lessons learned. After consultation and discussion with INDOT and KYTC, a contract will be established with local towing partners to enable them to intervene on the roadway in line with the performance standards set in the agreement.

# 4.3.1.1.c. Accident Analysis and Implementation of Liser Safety Improvements

Accidents are reported daily and monthly, in accordance with requirements defined in the Project O&M Plan. Aquarterly Operations Report summarizing the findings of daily and monthly reports is issued to IFA. All accidents are treated as non-conformances within the O&M Quality Plan, see Section 4.3.2.

Three types of events are considered within the WVB O&M Team's review and assessment process:

- Wear misses: events that in slightly different conditions, would result in an Incident
- Incidents: events with low consequences
- Accidents: Incidents with significant consequences.

The O&M Plan describes WVB's methodology to:

- Report accidents, incidents and high potential near-misses
- Manage the investigation of accidents, incidents and high potential near-misses
- Determine remedial/préventive measures
- Monitor effective implementation of actions

Data provided is analyzed by the WVB O&M. Team to identify root causes of events. The WVB O&M. Team considers potential remedial measures (such as installing attenuators, concrete barriers, guardrails or warning signs) that improve user safety: **Figure 4.3-5** summarizes this process.

The WVB O&M Team regularly conducts safety audits to assess effectiveness of Project safety, identify and implement areas for improvement, and review newly developed industry best practice. Any mitigation measures introduced throughout this process will be recorded and monitored to assess their effectiveness.

FIGURE 4.3-5 ACCIDENT ANALYSIS AND IMPLEMENTATION OF IMPROVEMENTS

# | Aprilyze | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Principals | Princ

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During the bid phase, the WVB O&M Team has been fully involved in the design process with the Walsh-VINCLCJV and WVB Design Team to produce an optimal design.

WVB's routine maintenance strategy is structured around proactive preventive maintenance. Our comprehensive Maintenance Plan, with a frequent inspection program, ensures early identification of maintenance needs and their quick correction to prevent small deteriorations from becoming larger problems.

In developing our proposal, WVB paid close attention to the impact of maintenance activities on availability of Project facilities. The conceptual design of the Project is optimized to minimize lane closures during the Operating Period.

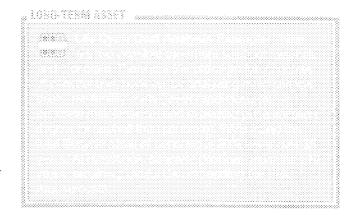
#### 4.3.1.2.a. Like Cycle Cost Analysis over the Daratica of the Agreement

The WVB O&M Team remains fully involved throughout design development to assist with maintenance and lifecycle optimization of design and the anticipation of resulting maintenance costs.

To determine expected material durability and useful lifespan, WVB uses benchmark data from its extensive list of projects in operation, combined with up to date best practice guidelines and industry research data. We have taken into account all Performance and Handback Requirements.

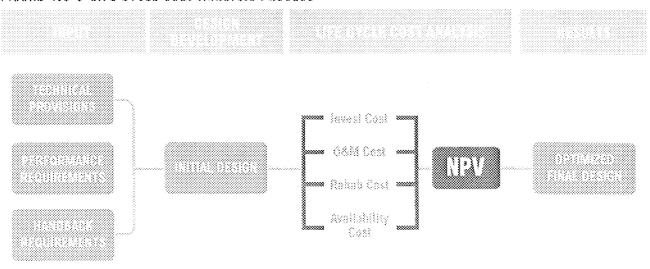
For each Element of the Project, the WVB O&M Team analyzed potential technical solutions accounting for variability of cost; increasing labor rate; and impacts of maintenance on roadway availability.

By using an internal discount rate, the WVB O&M Team calculated a Net Present Value (NPV) for each technical solution, allowing us to compare them and determine optimal lifecycle solutions (see Figure 4.3-6). This led to significant design improvements that lower the financial costs and limits traffic disruption.

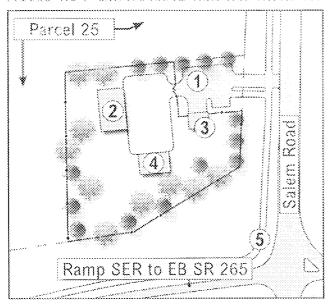


The WVB O&M Team, coordinating with Walsh-VINCI CJV, feeds into the construction and design quality assurance and control processes to ensure full consideration of material durability during specification, procurement and construction. This ensures selection and appropriate use of the most durable materials to provide the highest quality end product.

FIGURE 4.3-6 LIFE CYCLE COST ANALYSIS PROCESS



#### FIGURE 4.3.7 MAINTENANCE YARD AND FACILITIES



The WVB O&M Team is implementing this process on all elements of the Project, confident that we are providing an optimized lifecycle cost and a predictable maintenance strategy beyond the Term of the Contract.

#### 4.3,1,2,5. Details and Locations of Reintenance Yard and Facilities

As described in Section 9 of the Technical Provisions, and shown on **Figure 4.3-7**, WVB builds a maintenance yard and operations facility on parcel 25 of the excess right of way.

#### These facilities include:

- 1. Parking lot for staff and visitors
- 2. Covered vehicle garage
- 3. Office building with public reception area
- 4. Sand and salt covered storage facility
- 5. Dedicated parking for users of the pedestrian/bike path

#### 4.3.1.2.c. Prefiminary List of Specialized Maintenance Equipment

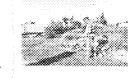
The WVB O&M Team specialized maintenance equipment include the following:

- Two patrol trucks, oustornized for high visibility and to fit the needs of the WV8 O&M Team
- · Portable luminous arrow boards
- Portable changeable message signs
- · Crash Attenuator truck



#### Consideration and a series and a series

- · Boom Truck (subcontractor)
- Small Tools and Workshop Malerial
- Lawn Mowers and Landscape Equipment
- · Traffic Management Safety Items.
- Sneeper Truck (subcontractor)



- · Winter maintenance trucks
- · Blades, mobile screaders
- Rubber Titted Loader



#### 4.3.1.2.d. Supply and Management of Maintenance Spare Ports

The WVB O&M Team uses dedicated software to manage and monitor the supply and use of spare parts. This ensures an up-to-date inventory of all parts to support expected maintenance requirements plus a reasonable amount for emergencies. Quantity of spare parts used and ordered is reviewed on an ongoing basis to identify and resolve any issues where parts are failing more often than expected.

The most significant requirement for maintenance spare parts are light bulbs and electric equipment to support lighting maintenance; barriers; guardrail and impact attenuator components; and signage elements.

### 4.3,1.2.e. Rootine Maintenance Activities Approach

The WVB O&M Team's approach is to maximize self-performance of the basic routine maintenance activities and work with expert subcontractors where necessary to complete specialized maintenance. This allows access to the latest specialist knowledge, best

practice and research data of our shareholders and specialized partners.

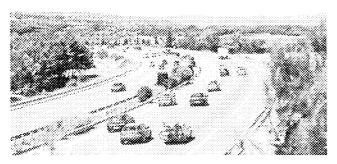
Where feasible, specialized activities such as drainage, pavement, lighting and landscaping maintenance is subcontracted to local firms. The WVB team endeavors to contract with local DBE firms. The frequency and planning of these activities is handled by the WVB O&M Team; strict safety and quality control procedures apply.

Whether self-performing or subcontracting work, the WVB O&M Team focuses on safety. Working on a live roadway is risky for maintenance staff and the traveling public. We complete a detailed risk assessment to identify, prioritize and address all potential bazards.

WVB O&M Team staff includes Patrollers working on a 24/7 basis and Roadway Maintenance Operators working on a daily basis. These personnel are fully equipped, qualified and trained to safely complete debris removal, general sweeping and cleaning of the roadway. After each winter season, the WVB O&M Team powerwashes all bridge structures to extend the life of bridge components.

#### ROADWAY MAINTENANCE

VVVB partners oring capitalensoon representation over 2,700 militaa of highway senter operations kultuding VISCI Highways Fatwork



seasons seasons. The facilities will be inspected daily for graffiti. If identified, the WVB O&M Team will remove it from structures within 24 hours and from gantries and high masts within 72 hours. Anti-graffiti coating is used on exposed surfaces of all walls and bridge abutments.

keep the roadway clear and safe at all times. In the winter months this means using our own in-house staff and equipment to plow and deice the roadway.

These efforts may be supported, when necessary, by local DBE firm Messier and Associates. In line with IFA requirements, we will target a maximum circuit time of two hours on the roadway. The WVB O&M Team's winter maintenance procedures ensure that, following any winter weather event, bare pavement is restored within two hours.

SERVICE SERVICES AND FOR CONTRACT PLUS

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All winter maintenance measures are described in the Project Snow and Ice Control Plan. This is updated annually to reflect changing project requirements, best practice and lessons learned. One source of lessons learned is the winter patrol diary our patrol teams complete daily during the winter season.

The WVB O&M Team completes an annual winter maintenance exercise at the beginning of each winter season. During this exercise we train our staff and those of our specialized subcontractor partners in all related methods, risks and safety requirements. This exercise will also enable us to check all winter maintenance equipment is operational and ready for the winter season.

#### 4.3.1.2.1. Traffic Monagement Derling Maintenance

All lane closures for Planned Maintenance work comply with the IFA Interstate Highways Lane Closure Policy (March 2010). The WVB O&M Team coordinates maintenance activities and associated lane closure requirements with IFA. INDOT and KYTC a minimum of two weeks in advance of planned activities. Where unplanned lane closures are required, the WVB O&M Team coordinates with the Department and KYTC as soon as possible and prior to taking any action to close lanes.

The WVB O&M Team follows a five-step traffic management procedure to implement safe, timely maintenance work, as illustrated in **Figure** 4.3-8. When maintenance is argently required (e.g. to enable hazard nutrigation), the procedure can be accelerated.

FIGURE 4.3-8 TRAFFIC MANAGEMENT PROCEDURE

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EVERT PLANTER. The WVB O&M Team is responsible for planning and coordinating all routine and rehabilitation maintenance performed whether by the WVB Team, a subcontractor or by other entities, such as public agencies, toll collection operators or their subcontractors.

\*\*ETTERNOOTH MONTHLY Planned Maintenance and Routine Maintenance schedules are submitted to IFA for approval at least 30 days in advance of the work. Annual Planned Maintenance schedules are submitted for IFA review and approval at least 90 days ahead of the year in question. Schedules describe, for each section of the works, all scheduled maintenance tasks or activities; the dates, times and durations for each activity; the total quantity of Planned Maintenance hours; and total number of Routine Maintenance lane hours.

the roadway, sidewalk or bridges, or any other event involving temporary traffic control, the WVB O&M Team prepares a Traffic Control Plan. The purpose of this is to ensure safety of staff and the traveling public. We coordinate with the Department and KYTC to ensure DMS and Highway Advisory Radio messages

give accurate information to the traveling public about fane closures or other traffic impacts. We support the continuous action of public information by the Department and KYTC via press releases and other media (e.g. newspapers, radio, television, websites and social networks) where required.

moval of traffic control devices and temporary signage meets the approved Traffic Control Plan and the MUTCD. Traffic and safety conditions are monitored, with the assistance of our Patrollers and Roadway Maintenance Operators. In case of congestion caused by the works, the traveling public is notified by the TMCs through the DMSs.

#### 4.3.1.2.g. lospection, Testing and Defect Management

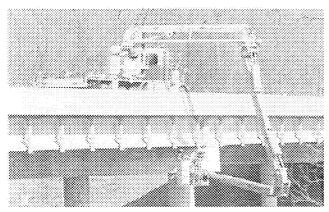
Regular inspections and tests are a crucial part of our proactive, preventive maintenance approach; they enable early identification of maintenance needs. This is important as it allows us to address correctable issues before they can develop into larger problems. It also allows more time to:

- determine deterioration rates
- identify methods to mitigate deterioration
- allow for adequate budgeting for future corrective actions
- mitigate any potential disruption to road users

The WVB O&M Team schedules inspections and tests to be completed by certified personnel. A General Inspection, including a pavement survey, is carried out each year.

#### SNOOPER TRUCK

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Both FHWA and AASHTO recommend routine inspections of new bridges at least once every two years. It is recommended to conduct inspections in both climate extremes. Structures will be inspected in detail and rated as per National Bridge Inspection Standards (NBIS) every two years.

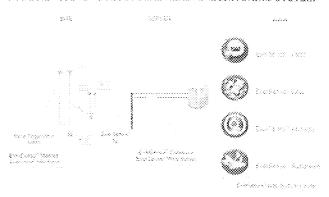
For the Main Bridge of the Project, the WVB O&M Team and the WVB Design Team will produce an inspection manual, including inspection frequencies, before Substantial Completion. This manual will be submitted to INDOT, FHWA and IFA for approval and will include provisions for:

- » Routine Inspection every two years
- In-depth Inspection every six years
- W Underwater inspections every four years
- Post Extreme Event Inspections as needed.

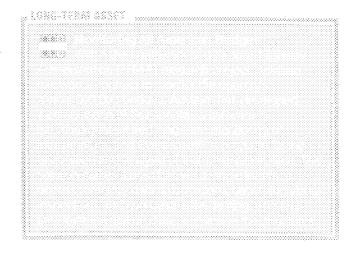
Results of the inspections are summarized in an inspection and test report, which identify, classify and prioritize any defects found. Our O&M Manager Vincent Meyer, uses this information to implement a maintenance strategy to rectify any noted items.

SYSTEM: The VINCI Group in-house monitoring systems specialist dedicated to the long-term inspection and monitoring of bridges, Advitam, has employed a risk-based analysis of the Main Bridge structure to ensure its continued safe functioning.

#### FIGURE 4.3-9 STRUCTURAL HEALTH MONITORING SYSTEM



The Structural Health Monitoring System (SHMS) of the Main Bridge is designed to monitor both static (temperature, corrosion, etc.) and dynamic (wind, fatigue) phenomenon, which is important for the high strength, cable-stayed wires and the bridge deck. The system brings a helpful complement to visual inspections for phenomenon that either can not be seen or are not relevant under a two year inspection cycle. Based on the data provided by the WVB Design Team, the system is configured for non-routine effects such as wind or impact, and for soft bazards such as fatigue, corrosion and normal wear and tear, to yield immediate and longterm performance at reasonable costs. The information gathered through the Eversense® software, shown in Figure 4.3-9, links inspections, required maintenance and rehabilitation over the 35-year Operating Period according to the decision making process. This system continues to provide valuable real-time information beyond the Term of the Contract. The SHMS is tested during the yearly routine inspection.



## 4.3.4.2.h. Majerein Accorate As-Beilt, inspection and Maintenance Records

As described in 4.1.7, the Walsh-VINCI CJV will create a DyMaDoc database of all as-built drawings and construction records. This is transferred to the WVB O&M Team before Substantial Completion as part of the transition process.

The WVB O&M Team uses the Department's CMMS to record all maintenance activities. Before Substantial Completion, using the Final Design, we create the Project asset database on which the CMMS will be based. The CMMS database includes all of the assets to be maintained throughout the Operating Period and a description of each item and piece of equipment.

The CMMS database includes the preventive maintenance activities required, as well as details of activities performed including dates and repair history. It records detailed information regarding the type of repairs made at any point and any failures experienced as well as all maintenance work performed.

This tool is used to maintain accurate as-built, inspections and maintenance records. The WVB O&M Team uses the CMMS for the quarterly Maintenance Work Reports listing all assets in the O&M program with a summary of all maintenance activities performed each month and the complete bistory of maintenance for the asset as reported by the CMMS.

The WVB O&M Team has a proactive, preventive maintenance approach to the Project. Inspections and preventive maintenance will result in early identification of issues. Corrective actions are taken so the problem is solved at a minimum cost and minimum disruption to the traveling public.

Rehabilitation works are managed according to delivery process D7 in the IMS, illustrated in Figure 4.3-10. This establishes procedures for the inspection of assets to identify the need for rehabilitation works; the planning and design of any major works required; the construction activity, and ongoing inspection and testing that ensures this work is satisfactorily completed, including certification of all completed works.

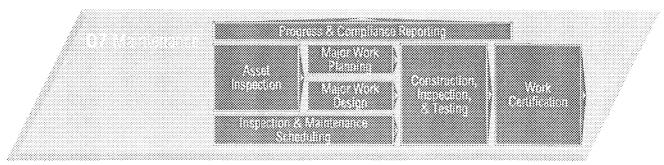
#### Rollina Program of Major Majoregacos

The WVB O&M Team forecasts maintenance activities anticipated during O&M. An associated cost estimate of each activity is updated regularly to account for inflation, price of materials and other factors that affect cost.

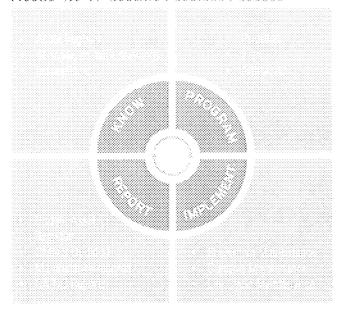
Based on past project experience and statistical data, we have developed a preliminary rolling program of maintenance to meet the Performance and Handback Requirements. This program is optimized to minimize lane closures and disruption to the traveling public. The

FIGURE 4.3-10 APPROACH TO REHABILITATION WORKS





#### FIGURE 4.3-11 ROLLING PROGRAM PROCESS



WVB O&M Team's Rolling Program of major maintenance will follow the process outlined in Figure 4.3-11.

Team has a preventive maintenance strategy, effectively minimizing full reconstruction and therefore limiting the disruptions for the traveling public, see Figure 4.3-12.

The WVB O&M Team will, whenever possible, maintain works during off peak hours (period B) to further minimize the impact to the traveling public. Only major deck repairs and the latex overlay on the main

bridge require long-term closures. These activities are tracked on the rehabilitation schedule providing for early notification to IFA, the Department, KYTC and the traveling public.

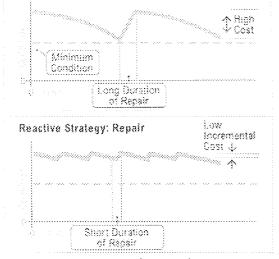
Programmelog of Migrist

The rehabilitation schedule, **Figure 4.3-13**, details the WVB O&M Team's anticipated programming of maintenance works. This schedule is based on assumed design life combined with past project experience.

of the pavement is an important factor in determining the most effective timing of major rehabilitation works. The surface condition dictates the safe operation of the roadway and provides direct interaction with the public in terms of user safety, comfort and general awareness of how well the roadway is being managed. Close consideration is paid to the traffic management to safely undertake the pavement works and minimize the delay and disruption to the user.

Team pays particular attention to the Main Bridge, as this element is critical and complex. Each element of the Main Bridge has been closely discussed between the O&M Team and the Walsh-VINCI CJV to optimize maintenance through bridge design. For example, the bridge inspection catwalk below the deck provides for thorough and safe inspections while maximizing uninhibited flow of the traveling public.

#### FIGURE 4,3-12 BENEFITS OF A PREVENTIVE MAINTENANCE PROGRAM



Evaranta

If a small concrete defect on a bridge deck is identified, it can be patched on a limited surface during a night maintenance window.

If the concrete defect on the bridge deck deteriorates more, the reinforced steel will start to corrode and a complete deck replacement, with full lane closures over several days, will be needed.

Reactive Strategy: Repair

#### 88398C)8x0

#### REHABILITATION

PISSRE 4.3-13 FREIBHBARR REBABILITATION SCHEBULE

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The WVB O&M Team performs preventive maintenance to extend the life of the bridge components beyond the Term of the Contract.

Project has ten new bridges and five existing bridges on the roadway. The Maintenance Strategy on these bridges included the following:

- Daily Visual Inspections by the Patrollers and Roadway Maintenance Operators,
- In-Depth Inspections every two years,
- Powerwash all structures at the end of the Winter Maintenance Period to wash away chlorides,
- Surface seal the deck and concrete barriers every four years to protect from chloride aggression.
- Limited rehabilitation and deck overlay are expected at 15-year intervals during the Operating Period.

Team has an annual budget that is updated yearly to coincide with the programming of the rehabilitation works. This process is illustrated in **Figure 4.3-14**.

The cost of Rehabilitation works is budgeted according to cost data from similar projects and market prices. Throughout construction the budget is reviewed and adjusted to match the as-built product.

HAMBERGE RESIDENCE THE WVB O&M Team analyzed the Performance and Handback Requirements of the Project Elements. These requirements influenced the design of some elements, such as bridge deck and pavement, to meet or exceed the targets.

To ensure that Handback Requirements are met, the WVB O&M Team worked backwards from the Residual Life and Useful Life requirements at the Term of the Contract. To meet these targets, the appropriate rehabilitation works have been included in the overall Rehabilitation Schedule.

The WVB O&M Team will develop a Handback Plansix years before the Term of the Contract. This will describe the three Residual Life Inspections to be performed and establish a strategy for any rehabilitation works needed to meet the Handback Requirements.

\$6880000: The preliminary rehabilitation schedule is presented in **Figure 4.3-13** and is discussed in Section 4.3.2.2.

stacks constructions. The WVB O&M Team analyzed the roadway and bridge design to ensure that future rehabilitation works can be accommodated by staged construction. For example, during the LMC overlay on the Main Bridge, we close the shoulders, install temporary barriers and shift the traffic to allow for two lanes of traffic in each direction. All traffic movements are compliant with INDOT and MUTCD standards. By applying the safest traffic management procedures, the WVB O&M Team limits disruption to the traveling public.

MANABEMENT OF REAGENETATION WORK SIMULTANGERSLY
WITH STANDARD REAGE The WVB O&M Team uses an
integrated approach with one team and one manager;
Vincent Meyer, handling both routine Operations and
Maintenance and Rehabilitation works. This single
point of leadership provides a coordinated approach to:

- **\*\*** Activity Planning
- Traffic Management
- Safety
- Quality Control

Wherever feasible, we schedule activities in the same location and time to minimize impacts to the traveling public.

#### FIGURE 4.3-14 PROGRAMMING AND COSTING

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#### albiz operavions and manifemance management approach

The WVB O&M Team's approach to the O&M of the facilities is to maximize self-performance by our fully integrated team, led by Vincent Meyer with support of specialist organizations. This approach ensures we maintain the Project understanding gained from our design-build process and combine with our subcontractors' specialized knowledge, equipment and best practice. Our use of local DBEs and SMEs will maximize local economic benefits.

This section outlines the preliminary Operations and Maintenance Management Plan (O&MMP) which is part of the general Project Management Plan (PMP) described in 4.1. The O&MMP complies with all principles described in the PMP.

Plans that apply during the Operating Period, and form part of the O&MMP, include:

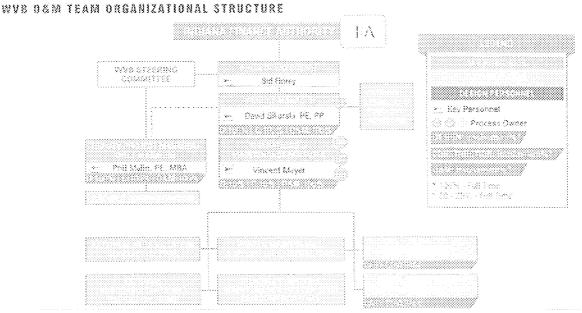
Operations and Maintenance Plan	Yearly
Maintenance Plan	Yearly
One-Year Plan	Quarterly
→ Five-Year Pian	Yearly
Snow and ice Control Plan	Yearly
Handback Plan	Six years before the and of Term
Sustainability Management Plan	Every five years

#### a.a.a.a deduketation

WVB's organization reflects industry best practice and our experience operating and maintaining similar facilities. We effectively integrate all disciplines within our team, including specialist subcontractors. Team members are chosen for technical expertise and their collaborative attitude.

#### 4.3.2.1.a. OSM Organization, Participating Firms/Organizations and Individuals

As part of our vertical integration, the WVB O&M Team self-performs O&M through the life of the agreement. We subcontract major maintenance and rehabilitation work, and specialized maintenance. The WVB O&M Team uses contractors who worked in the construction phase as much as possible. This is possible since the lead CJV partner, Walsh Construction, is a local-Indiana firm, who will continue to work in Indiana and Kentucky. Firms such as Milestone and James H. Drew and local DBE firms when appropriate, are consulted during design-build to establish long-term relationships for specialized maintenance activities.



W/ V % East End Partners (SE)

#### A 3-2-1 set. Releasing Responsibilities

WVB's O&M Team's proposed organizational smucture is shown on the previous page, with the interrelation and lines of communication and reporting between all Project partners indicated. Each key partner's roles and responsibilities are also described in **Table 4.3-2**.

#### ALECTION Rev OS M. Personari Feasilise and Responsibility

Vincent Meyer, O&M Manager, is an IFAspecified Key Personnel, He provides input
during design-build of the Project to ensure O&M
requirements are met. Vincent has more than 16 years
of experience in design, construction, operation and
maintenance of major transportation road infrastructure.
Recently, he served as maintenance manager on the
ASF network (624 miles of highway with 2,000 civil
works structures) in France from 2008 to 2011. He is
currently in charge of VINCI Concessions O&M on
several PPP projects in the development phase.

Vincent provides 100% of his time to the Project during the O&M phase.

#### 4.5.2.15. W. Crainbarter and Experience

To ensure personnel meet and exceed IFA's requirements for safe, high quality O&M delivery, WVB only employs suitably qualified and experienced personnel (SQEP). To achieve this, our project management team follows our SQEP procedure, as explained in Section 4.1. For every position, this establishes the role requirements and responsibilities, experience and qualifications needed, see Table 4.3-3. Once hired, candidates are given site specific training as required and periodic performance reviews to ensure professional development.

#### 4.3.2.1.b. (Billiot Approach to 0.64)

The WVB O&M Team is committed to working collaboratively as a joint venture and with IFA/INDOT/KYTC at every stage. The common integrated management system applied is set out in our Project Management Plan.

YABLE 4.3-2 RESPONSIBILITIES OF EXPERIENCE STAFF

David Sikorski Project Manager	<ul> <li>Accountable for the delivery of the PPA contract — project manage and direct the whole team</li> <li>Act as a single point of contact for the IFA</li> <li>Coordinate the efficient management of all resources</li> <li>Deline, deploy, review and maintain the business vision, values and strategy for a safe, quality O&amp;M delivery</li> <li>Report on Project progress and performance to the Client and Lenders</li> <li>Communicate and contribute to community stakeholders: manage public relations with the Client</li> </ul>
Phil Matin Deputy Project Manager/OHSE	Ensure O&M strategy, quality, safety, and environmental policy align with PPA requirements Develop, review, and maintain the IMS for effectiveness and performance Report on performance as required by the PPA Coordinate quality / process improvement activities, including flaising with the Client and third parties on QHSE management Access, monitor and report on compliance against relevant legislation, WVB policies and PPA.
Vincent Meyer Operations and Maintenarios Manager	Ensure safety on the Project for the users and the stalf of WVB     Preserve the condition of the assets in accordance with the legislation and the Technical Provisions     Ensure quality of the service provided to users     Define and implement the maintenance strategy of WVB     Procure and coordinate with specialized maintenance subcontractors
Administrator	Coordinate and manage financial accounting and reporting, implementing robust systems and processes     Coordinate and manage statutory accounts preparation, audit clearance, and treasury management
Patroller	<ul> <li>Patrol the project; prevent safety issues; assistance to the traveling public; action in case of incident; participation in routine maintenance; participation in winter maintenance activities</li> </ul>
Roadwoy Maintenance Operator	<ul> <li>Participation in routine maintenance, cleaning, minor repair, sto</li> <li>Participation in winter maintenance activities</li> <li>Implementation of Management of Traffic during Maintenance Works</li> <li>Action in case of Incident if needed</li> </ul>

TABLE 4.3-3 D&M PERSONNEL QUALIFICATIONS

Patrollers	Must have a Commercial Driving License	1-3 years in construction or operations	Safety, Emergancy Crisis and Winter Maintenance trainings
Roadway Maintenance Opérators	Must have a Commercial Briving License and a High School Diploma	1-3 years in construction or operations	Safety, Emergency Crisis and Winter Maintenance trainings
Rehabilitation Subcontractors	Construction Engineers among the staff	10-15 years in construction	WV8 QHSE Procedures
Winter Maintenance Subcontractors	Adequate experience and training	5-10 years in winter maintenance	WVB OHSE Procedures
Specialized Routine Maintenance Subcontractors	Adequate experience and training	5-10 years in their speciality	WVB QHSE Procedures
Inspectors	Certified personnel as per INDOT and FHWA Standards	10-15 years	WV8 OHSE Procedures

values and objectives agreed at the Project vision, values and objectives agreed at the Project outset are upheld throughout the Operating Period of the work. As our O&M team members join the Project they are asked to review and sign the Partnering Agreement, signaling their commitment to it. Project induction training and regular briefings continually communicate our partnering approach. To support team building, we encourage attendance at regularly scheduled social events.

approach and decision making processes established during design and construction remain consistent through the Operating Period. Both decision making and quality assurance are led by Deputy Project Manager. Phil Malin, and supported by our inspection and reporting activities. Active throughout the Operating Period, Phil ensures objective review, approval and channeling of our delivery, to maintain a uniform quality approach.

Common induction training communicates our management approach, individual responsibilities, safety rules and specific quality messages. Focused training is conducted to explain quality standards to maintenance subcontractors.

#### 4.3.2.1.s. Decision-Making Process and Dispute Resolution

Project Manager, David Sikorski, with the support of the WVB Steering Committee, provides clear leadership, including objective setting and decision making. Through our dispute resolution process, every WVB O&M Team manager is aware of their autonomy to make decisions. This encourages correct and rapid resolution of issues at the lowest possible level. To facilitate decision making we use a matrix of potential issues that could arise. This clarifies the escalation and reporting that applies in each case.

All partners commit to resolve any internal disputes according to the terms of the contract. Our priority in the event of any dispute the efficient continuation of O&M activities.

#### 4.3.2.1.d. Training Programs

To ensure continuous improvement and safe O&M, the staff is regularly trained. WVB's O&M Team is trained to understand the importance of the O&M quality management system, including a special focus on the safety of users and workers.

The O&M requirements for a cable-stayed structure are highly technical. In order to ensure the O&M staff is properly trained, experts from VINCI Concessions providing O&M for cable-stayed structures worldwide, will provide annual on-site training. The WVB O&M management team will also travel abroad to visit other VINCI Concessions' projects to foster ideas for improvement.

Patrollers and Roadway Maintenance Operators are trained several times a year. These trainings are carried out either by the Managers of the O&M Team or by external experts from the VINCI Concessions network.

Subcontracted firms are trained as required for major maintenance works. Potential training programs that will be conducted include:

Crisis Exercise	Yearly	Yeady
Winter Maintenance	At start of winter	At start of winter
Safety	Yearly	Daily
Quality Management System	Yearly	N/À
Fire and Hazardous Mitigation	Yearly	Yearly
Human Resources Management	Yearly	N/A
Environmental Compliance	Yearly	Yearly

#### 4.3.2.1.a. Consecnication and Documentation

Internal lines of communication and reporting during the Operating Period follow the O&M organizational structure discussed in Sections 4.3.2.1.a and 4.3.2.1.a.i. Document sharing requirements are detailed in all O&M management system procedures, including method statements and reporting templates.

facilitated through multiple formal and informal channels to maximize collaboration and trust in the WVB O&M Team (including supply chain) and support continuous performance improvement. Since the WVB O&M Team is small, and located in the O&M Building, internal communication will be naturally facilitated.

and implemented to enable our O&M management team to meet with each other and with our specialist subcontractor partners to review performance, ensure good governance and project control, support effective communication and facilitate decision making during the O&M stage of the Project. If subcontractor performance is inadequate this is discussed at the regular performance meetings and an improvement plan is created, implemented and monitored.

### Project management documentation and data is stored electronically and shared via the common collaboration and document management platform DyMaDoc, used during construction. Asset management and maintenance records are stored in the INDOT-supplied CMMS. Access to both systems is provided to all authorized members of our Team and subcontractors as necessary. The systems will facilitate document sharing and review by allowing information to be issued electronically to select lists of email addresses. Maintaining centralized data sources eliminates the potential use of outdated information.

responsibilities within our organization. Report templates will be agreed with IFA and used to make sure the current data is available, to ensure consistency and facilitate interpretation of results. Senior managers use these reports to support continuous improvement.

#### 4.3.2.1.4. Appreach to O&M Prior to pad Following Substantial Commission

O&M Manager, Vincent Meyer, is involved during design-build to ensure he is aware of issues that arise and to provide input into any decisions that will affect the Operating Period.

Coordination between Vincent, and the Walsh-WINCI CJV Construction Manager, Brian Hoppel, is particularly important in the six months prior to Substantial Completion. Vincent and his team participate in the preparation and resolution of the punch list with the Walsh VINCI CJV. This process prepares the O&M Team to be fully operational on the day of construction Substantial Completion. This Pre-Operation Period is also a time when the O&M Team is able to focus on handover activities from construction to operation, including asset inventory, commissioning and testing. This ensures the appropriate transfer of knowledge and control from the construction team (Walsh-VINCI CJV) to the operating team (WVB O&M Team).

During the Pre-Operation Period, the O&M Team gradually ramps up to be fully staffed at least one month before Substantial Completion. The time leading up to Substantial Completion is used to train the O&M staff.

Following Substantial Completion, the Walsh-VINCI CJV continues to work on Punch List items. At this time, the WVB O&M Team is fully in charge of organizing the planning, safety and traffic management of the Walsh-VINCI CJV works. David Sikorski, Project Manager during both construction and O&M, will ensure completion of the project delivery.

#### 4.3.2.1.5. Imerigosa Desire OSW

Throughout the Operating Period, establishing open, honest relations with the IFA, the Department and all applicable third parties is vital to smooth, safe operation and maintenance of high quality facilities. The overall approach described in our Project Management Plan (see section 4.1.1.b) still applies. **Table 4.3-4** shows how we interact with key O&M interfaces.

David Sikorski, is the main contact for IFA, INDOT and KYTC. He is supported by our Operation and Maintenance Manager, Vincent Meyer, who coordinates with applicable third parties. The WVB O&M Team regularly reports on performance in relation to Project progress, quality and safety as well as upcoming Planned Maintenance works.

# 4.3.2.1.5. Public Information and Communications Approach

\*\*\*\*\* The WVB O&M Team understands the importance of efficiently providing clear, reliable and prompt information to the public throughout the Operating Period. This will be important to maximize safety and maintain a high quality image of the Project. We provide information for press releases and access to

a company spokesperson when needed. The WVB O&M Team provides advance information to IFA for approval prior to distribution to the public.

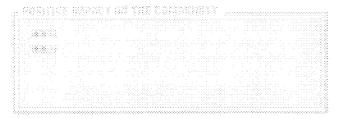
Public information and communication in all project stages is controlled by the WVB Public Information Plan. This is updated to become the O&M PIP to ensure it reflects the changing requirements for public communications at this stage of delivery.

David Sikorski provides Public Information for the Project during the Operating Period. During design and construction David supports Dan Hartlage of Guthrie/Mayes in the Public Information effort. David will be involved in all facets of the O&M and will bring a complete understanding to the task of providing Public Information. David has over 25 years experience in transportation engineering and operations with particular expertise in Public Private Partnerships. He draws on this experience and his work with Dan during design and construction to effectively manage the PIP.

PIP ensure the full and regular consultation of all parties. This occurs annually, prior to substantial changes in practice or as part of the planning process for activities with significant potential impacts (e.g. major rehabilitation activities). All relevant information is provided in advance and sufficient notice given to allow all parties concerned to consider potential issues. Notification to the public about upcoming lane closures/lane adjustments and detours will occur after IFA approval. David directly handles communications with local businesses.

TABLE 4.3-4 COMMUNICATION APPROACH

	CORRESPONDED	
IFA / INDOT / KYTC (and consultants)	The WVB O&M Team will organize meetings with appropriate representatives to discuss: future lane closures; the previous month's maintenance activities and outcomes; Planned Maintenance activities for the next month and any expected impacts or issues; incidents / accidents, adjustments to the Availability Payment; assessment of Non-Compliance points, Unavailability Events, and other pertinent information.	Monthly
Traffic Incident Management Team	The WVB O&M Team will attend all meetings to review near miss, Incident and accident data and identify measures to reduce the occurrence of such Incidents. The effectiveness of measures already introduced will also be examined.	Quarterly
Pederal, state and local agencies	The WVB O8M Team will organize meetings with appropriate agencies affected by rehabilitation work. The WVB will altend meetings requested by agencies to coordinate with future projects.	As Needed
Utilities	The WVB O&M Team will organize meetings with utilities affected by rehabilitation work. The WVB will attend meetings requested by Utilities to coordinate future utility projects.	As Needed



#### 4.3.2.2 BASSING SCHOOLE

WVB has a detailed Operation and Maintenance Schedule showing all major components. This schedule is summarized in the preliminary baseline schedule as provided in Volume 2 Appendices. The baseline O&M schedule provides an outline of our expectations for all maintenance requirements over this 35-year agreement. This schedule has been developed based on the specific design of the Project and our experience performing similar services on many past projects. This includes understanding of the latest industry best practice, the expected design life of the structures being constructed and manufacturer expectations of the materials to be included.

## 4.3.2.2.a Schedale -- Proposed CSMI

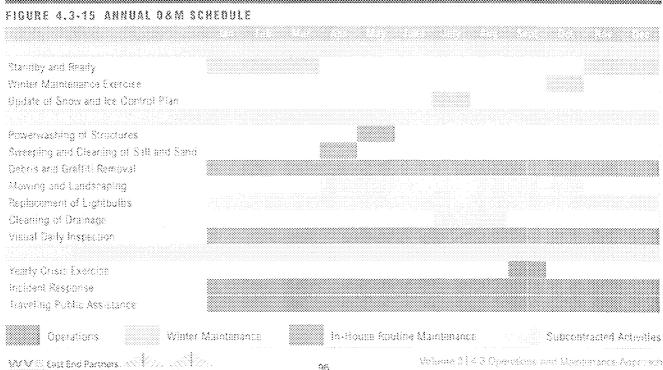
The O&M schedule remains a live document throughout Project lifecycle and is subject to ongoing review and update. It enables us to manage all O&M activity effectively, allocate resources efficiently and closely monitor

performance in all areas to achieve continuous improvement. This includes the activities of all subcontractors.

Passered. Assistanting assumed the sempone The Planned and Routine Maintenance Schedule is an annual schedule showing all daily, weekly and monthly scheduled maintenance activities, see Figure 4.3-15. Vincent Meyer, has the flexibility to plan these activities according to local requirements, in response to the weather, special events or to minimize traffic disruption. This schedule is updated weekly and submitted to IFA monthly, It is reviewed internally to enable refined scheduling on a weekly/daily basis.

The Rehabilitation Works Schedule is a 35-year schedule showing annual Planned Maintenance. This is updated yearly to allow activities to be planned for the following years in response to issues identified during the periodic visual and detailed inspections.

SALGRANDS PERFORMANCE MONTHEY Compliance with the Project requirements is monitored throughout the Operating Period. Any issues, events or defects are recorded as non-conformances.



The quarterly Operations Report provided to IFA includes the following O&M records: complete records of any Incidents, inspections, and assessments, details of rehabilitation works, monthly lane closures and supporting information necessary to confirm the occurrence and satisfactory resolution of any non-compliance events, unavailability events or defects. Based on this information, the report includes a high-level summary of Non-Compliance Events, Unavailability events and Non-Compliance Point assessments.

With the CMMS, the WVB O&M Team can access real-time reports on the roadway O&M. Performance compliance data is extracted monthly from this to enable real-time reporting and quick corrective actions to be taken in response to any Non-Compliance Event.

All reports to be provided as per the PPA and Technical Provisions will feed into the performance calculation.

Team calculates the quarterly payment request with data (e.g. Lane Closures and Non-Compilance Events) from the CMMS and O&M reports. This calculation is based on three items:

- W Unavailability Adjustment, based on the Lane Closures Record
- Non-Compliance Adjustment, based on the monthly Performance Calculation
- Other Non-Compliance Adjustment, calculated quarterly as events arise

The WVB O&M Team also includes the supporting information on which the payment request is based.

4.3.2.2.a-ii. Approvabilito integrating Sebecontract Activities

The WVB O&M Team subcontracts services to specialists where this expertise benefits IFA. To ensure smooth management of the Project, all subcontract work is integrated seamlessly into our O&M work plan. The subcontractors become part of our 'one team' approach, through their inclusion in joint training activities and our shared project goals. This includes involving them in weekly and monthly schedule review meetings as appropriate to their level of activity on the Project.

Some subcontractor repair activities are emergencies. As such, direct communication and coordination with them at all times is important and therefore contractually assured. We incorporate the performance requirements of the Technical Provisions into all subcontracts, including financial penalties, to ensure our partners are aware of the Project quality, safety and environmental requirements and abide by them. For example, our winter maintenance subcontractor is required to achieve bare pavement within 2 hours of the end of any winter event, as set out in the PPA documents.

All WVB O&M subcontractors are required to commit to our management objectives. These are defined in a charter which all project participants (including WVB O&M Team, subcontractors, inspection organizations and main suppliers) are asked to review and sign upon joining the Project team.

4.3.0.2.a-sii. Approach to Achieva the Project Schedule and Recover any Schedule Shppage

management activities is our primary method of managing resources and activities (both our own and subcontractors) in order to achieve the Project schedule. This will be supported by accurate field updates of progress for incorporation into the schedule, these updates will identify any areas of slippage. Updated schedules will be included in the quarterly Operations Report to IFA.

\*\*ECONOMICS SERVICES Early identification of negative variance from either the maintenance or re-habilitation schedule, through our ongoing review of performance against the schedules, limits the need for any schedule recovery. If any slippage does occur we will identify the causes and accelerate related activities on a critical path to enable schedule recovery. This includes the allocation of additional management resources if required and increased performance measurement until the schedule slippage has been recovered.

#### 4.3.3 OPERATIONS AND MAINTENANCE QUALITY MANAGEMENT

O&M Team is committed to achieving exceptional quality performance and meeting all of IFA's quality expectations for the Operating Period of the Project. Our general approach to quality management has been described in Section 4.1.5. Quality management is one of the key processes within our IMS (control process C2), which will apply throughout all Project stages to achieve a consistent approach to quality management, from design and build through O&M.

During the O&M phase our quality commitments will be to:

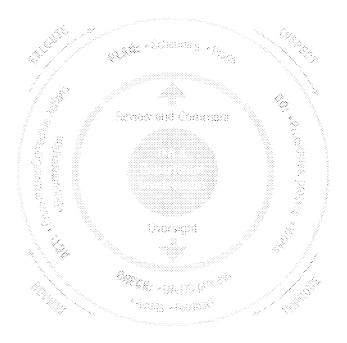
- Achieve the contractual quality, deadline and budget goals set in the PPA in accordance with the applicable legal framework and standards
- Ensure the O&M Team meets all Project operation and maintenance requirements in line with the contractual requirements, public satery standards, WVB's safety standards and environmental standards
- Establish best practices and foster continuous improvement through collected and solicited feedback.
- Communicate with all interested parties, including IFA, users and nearby residents, to promote a positive image of the project and anticipate and address any potential sources of dissatisfaction.

The O&M Quality Plan identifies the means for monitoring and evaluating all aspects of Project delivery against the Performance Requirements specified in the Technical Provisions. All of the supporting data and calculations used will be submitted to IFA in the quarterly Operations Report. Because the final design, equipment selections, and construction quality impacts the requirements of the Plan, the WVB O&M Team considers these requirements further during the design development phase. At that time, our outline Plan will be adapted to ensure it meets the specific requirements of the facilities that we design and build.

As shown on **Figure 4.3-16**, the WVB O&M Team follows the same quality assurance and control principles

used in the design and construction stages of the Project detailed in Section 4.1.5. The quality assurance system will include procedures to validate the data, times, dates and logs that are the basis of the Availability Payment and Noncompliance Points Adjustment calculations.

FIGURE 4.3-16 QUALITY MANAGEMENT APPROACH



A BESCRIPTION OF QUALITY RESUREMENT AND ROBLITY CONTROL.
FRACTIONS: Deputy Project Manager, Phil Malin, will be responsible for quality throughout the Operating Period. The approach and quality plan will be continued from the design-build processes to provide consistency from design, construction and through the Operating Period.

This includes our independent quality assurance team, which will remain separate from the teams actually carrying out the activities being monitored and assessed.

APPROACH TO INVOLVESSENT REPORTED RELATIONSHIPS AND RESPONSIBILITIES FOR IFA AND DEPARTMENT SURRESHIP. The quarterly Operations Report provided to the IFA form the basis of the IFA and Department's review of our performance and progress. This key report includes all quality system results, including reports on closures. Unavailability Events, Non-Compliance and Incident

log data. It includes all findings from the O&M quality management and assurance system as well as our assessment of O&M subcontractor activities, potential areas for performance improvement and lessons learned where appropriate.

The WVB O&M Team also provides the following reports for IFA's use.

469000	
Winter Patrol Diary	Daily during winter
Incident Reports	When arises
Planned Maintenance Schedule	Monthly
Lane Closures Record	Mentily
Non-Compliance Events Report	Monthly
Operations Report	Quarterly
Unavailability Adjustment Report	Quarterly
Unplanned Meintenance Activities Report	Quarterly
Maintenance Work Report	Quarterly
Non-conformance Report	Quarterly
Performance Inspections Results	Yearly
General Inspection Report	Yearly
Performance and Measurement Table	Yearly
Rehabilitation Work Report	Yearly
Pavement OBSI tests Reports	Every 3 years

The O&M Quality Management Plan details how the WVB O&M Team collects and records the information for these reports. Information collected will include (but not be limited to) details of:

- Incidents
- # IFA / User satisfaction
- Process performance
- Inspection and audit results
- CMMS data
- Other IMS activities (including meeting minutes, management review findings, etc.)

The analysis of this information is reviewed at dedicated meetings to verify overall compliance to the PPA requirements. These reports are provided for IFA Oversight.



During the O&M Period, IFA has access to:

- Accompany the WVB O&M Team on physical performance inspections, conducting its own performance inspections and assessing and scoring the WVB O&M Team's O&M records
- Monitor and audit the WVB O&M Team's detection, reporting, response times and times to rectify breaches and failures for which non-compliance points or unavailability adjustments may be assessed pursuant to Section 11.3 of the PPA in accordance with Exhibit 10 (Payment Mechanism)

The WVB O&M Team coordinates and cooperates with IFA, its authorized representative and the Department to facilitate IFA's and the Department's oversight activities. IFA has the ability to use and access the CMMS to capture these observations. Observations will be identified either as conforming or non-conforming to related requirements of the PPA documents. The WVB O&M Team responds to all detected instances of non-conforming work using the CMMS.

Phil has quality management authority independent to that of the Project Manager and has direct quality reporting obligations to the Project Steering Committee and to IFA in relation to O&M quality management.

ANTONIAL PROCESS FOR PROPARIOR AND REGISTRAS REPRESES:

WVB O&M Team Patrollers and Roadway Maintenance Operators have a daily record of operations that will document all Incidents, Non-Compliance Events, Unavailability Events, Jane closures and any issue that might arise on the Project. The O&M Manager reviews and approves the record at the end of each day. These records are reviewed weekly by the Project Manager. The WVB O&M Team procedure for issuing non-conformance reports is set out in the O&M Quality Plan. These can be issued either by IFA or the WVB O&M Team. All Non-Compliance Events are considered as non-conformances. Non-conformances could arise in relation to:

- Application of the project management system (e.g. company quality, health, safety, environment and sustainable development measures), detected during audits, following complaints or via claims from IFA.
- The operation and maintenance services provided by the WVB O&M Team.
- The project assets, as identified during project inspections.

The Quality Plan explains the methodology for dealing with any actual and potential non-conformances in a timely and efficient manner as well as for triggering corrective and improvement/preventive actions.

The key steps to document and correct a non-conformance event are as shown in Figure 4.3-17.

EDECTIONS OF THE WVB O&M Team uses the results of our formal O&M quality performance audits, tests and inspections, together with any team observations, claims or reported failures to comply with contract requirements, and identify continuous improvement opportunities. This will include both remedial actions needed to correct deviations and avoid their recurrence and preventive actions needed to prevent future deviations from occurring at all.

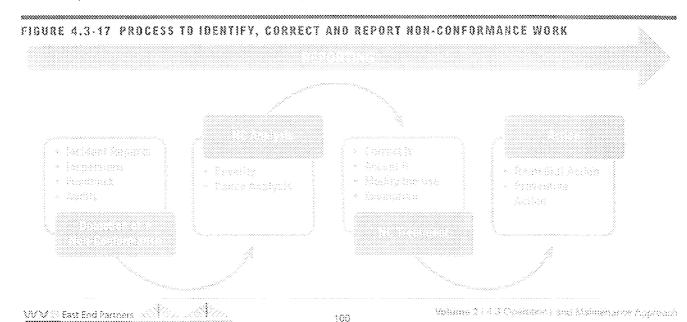
As remedial and preventive actions are identified, they will be recorded in an Actions List. This explains how each action was defined, its approval cycle and related monitoring requirements. For all approved actions the list includes a detailed description, date of issue, deadling for action and identified owner.

Phil Malin will use the Action List to track the progress of remedial and preventive actions implemented. The Action List will be reviewed monthly, as an important part of the ongoing Management Review process. After a suitable period of time (depending on the action), we assess whether actions have been successful. Evidence will be captured to document this. Once we are satisfied the problem is not recurring, the issue is closed and recorded as such on the Actions List. Successful actions are then introduced into our standard maintenance procedures as best practices.

#### SOLDEN EARS BRIDGE

Pfel Millin tröngs inusions laurined and expensioner Arms a simular PPP caute-stayed finiden. Gooden Euro Beldge en Procest Columbia.





#### EXHIBIT 2-H

#### EQUITY MEMBERS, CONTRACTORS AND KEY PERSONNEL COMMITMENTS

#### **Equity Members**

Developer represents and warrants that the following are all the Equity Members:

Wi East End, LLC; VINCI Concessions Investments USA Inc.; Bilfinger East End Holdings Inc.

#### **Key Contractors**

Developer commits to provide, and IFA hereby approves, the following firms and organizations to initially serve as the following Key Contractors:

Names of Key Contractors	Key Contract
Walsh Construction Company / VINCI Construction Grand Projects (joint venture, "Design-Build Contractor"))	Design-Build Contract for the East End Crossing (Louisville-Southern Indiana Ohio River Bridges Project)
Jacobs Engineering Group, Inc.	Agreement for Design Services (Phase I)

#### Other Contractors

Developer commits to provide, and IFA hereby approves, the following firms and organizations to initially serve as other Contractors:

Names of Contractors	Contract
VINCI Concessions S.A.S.	operations and maintenance services
International Bridge Technologies, Inc.	design subconsultant
Guthrie/Mayes	public relations services
Third Rock Consultants LLC	environmental consultant services
James H. Drew, Corp.	electric, ITS and signs subcontractor
Advitam, Inc.	bridge health monitoring services
C. Lee Construction	sitework services

Messier & Associates, Inc.	trucking services
American Structurepoint, Inc.	design subconsultant
Earth Exploration, Inc.	geotechnical subconsultant
RWDI	wind subconsultant
Stantec	geotechnical subconsultant
Buckland & Taylor	bridge subconsultant
MacDonald Architects-	bridge architect
Carmen & Associates	landscape architect

## Key Personnel

Developer commits to provide, and IFA hereby approves, the following individuals to initially serve as the following Key Personnel:

Names of Key Personnel	Key Personnel Positions
Sid Florey	Project Executive (if different from the Project Manager)
David Sikorski	Project Manager
Phil Malin	
Bruce Williams	
Greg Ciambrone (part time, 25% only)	Deputy Project Manager(s)
Kristof Van Loon	Financial Director
Dan Hartlage	Public Information Coordinator
Brenda Wolf	DBE Coordinator
Marcos Loizias	Lead Engineer
Dan Tassin	Lead Bridge Engineer (if different from Lead Engineer)
Brij Goyal	Lead Tunnel Engineer (if different from

Lead Engineer or Lead Bridge E				
Brian Hoppel	Construction Manager			
Pierre Morand	Bridge Construction Manager (if different from Construction Manager)			
Frederic Sciblo	Tunnel Construction Manager (if different from Construction Manager or Bridge Construction Manager)			
Martine Julia-Sanchez	Quality Manager			
Mark Hedrick	Utility Manager			
Mike Lawler	Safety Manager			
Gina Morris	Environmental Compliance Manager			
Vincent Meyer	Operations and Maintenance Manager			
John Reid	Construction Quality Control Manager			
Bruce Peterson	Design Quality Assurance Manager			
Courtney Norris	Construction Quality Manager			

## EXHIBIT 2-I

## **COST TABLES**

[attached]

- 2-I(1) Summary Cost Table
- 2-I(2) Capital Cost Table
- 2-I(3) Operating Period Cost Table

#### FORM O

#### SUMMARY COST TABLE FORM

#### Summary Cost Table Form instructions:

- a) In Form 0-1 Capital Cost Table, indicate, in figures, the lump sum labor and non-labor capital cost for each East End Crossing element listed.
- b) In Form O-2 Cumulative Cost Table, provide a cumulative quarterly curve of cost expenditures.
- e) In Form 0-3 Operations Phase Cost Table indicate, in figures, the expected annual lump sum costs for each element listed, for the first ten years of operation.

Form 0 – 1 Design and	Construction Capital Co	st Table		
Cost Category	Capital Cost			
Project Management	\$ 43 000 000			
Design and Construction management and general activities	\$ 100 000 000			
Design	\$ 56 400 000			
Environmental	\$ 4 000 000			
Roadways Construction	\$ 99 300 000			
East End Bridge Construction	\$ 122 500 000			
Tunnel Construction	\$ 84 360 000			
Other Structures Construction	\$ 87 376 000			
Utilities	\$ 25 264 000			
Contingency and Profit	\$ 140 800 000			
	Labor Cost	Non-Labor Cost		
Subtotals	\$107 932 000	\$655 068 000		
Totals	als \$ 763 000 000 (Total Project Capital Costs)			

Form O – 2	Cumulative Desig	n and Construction Capital Cost Table
Cost Category	Quarter	<u>Capital Cost</u>
Construction Year 1	Quarter 1	\$ 59 095 011
	Quarter 2	\$ 111 963 242
	Quarter 3	\$ 150 718 772
	Quarter 4	\$ 186 104 262
Construction Year 2	Quarter 1	\$ 244 707 045
	Quarter 2	\$ 326 605 601
	Quarter 3	\$ 418 111 066
	Quarter 4	\$ 488 366 439
Construction Year 3	Quarter 1	\$ 551 544 350
	Quarter 2	\$ 618 196 213
	Quarter 3	\$ 674 097 760
	Quarter 4	\$ 704 251 099
Construction Year 4	Quarter 1	\$ 726 122 444
	Quarter 2	\$ 750 002 350
	Quarter 3	\$ 761 477 618
	Quarter 4	\$ 763 000 000
	Totals	\$ 763 000 000 (Total Capital Cost for East End Crossing)

	<u>Form 0 – 3</u>	Operating	Period Cost	<u>Table</u>		
Cost Category	Annual Expenditure Plan (1)					
	<u>Yr 0 (3)</u>	Yr.1	<u>Yr 2</u>	<u>Yr 3</u>	<u>Yr 4</u>	<u>Yr 5</u>
Operations (2)				**************************************	······································	***************************************
Insurance						
Roadway and Structure Maintenance						
Rehabilitation Work						
Totals	501 972	3 318 360	3 549 741	3 585 683	4 556 766	3 721 862

<u>Form</u>	<u> O – 3 Opera</u>	ating Period	l Cost Table			
Cost Category	Annual Expenditure Plan (1)					
	<u>Yr 6</u>	<u>Yr 7</u>	<u>Yr 8</u>	Yr 9	<u>Yr 10</u>	
Operations (2)	······································	• • • • • • • • • • • • • • • • • • • •	(*************************************		·····	
Insurance	<del></del> .					
Roadway and Structure Maintenance						
Rehabilitation Work						
Totals	4 540 583	4 027 694	5 549 495	4 569 223	5 258 733	

#### In USD

- (1) Figures in Nominal Numbers(2) "Operations Cost Category" includes Vehicle and Equipment Renewal costs and Inspection Costs(3) Yr 0 2016 Partial Year

#### EXHIBIT 2-J

#### TERMINATION FOR CONVENIENCE CALCULATION METHOD

[attached]

#### FORM V

#### TERMINATION FOR CONVENIENCE CALCULATION METHOD

Should IFA terminate the Agreement according to <u>Section 20.1</u> of the Agreement, the undersigned Proposer hereby chooses to be paid a compensation amount equal to the *Forward Looking Termination for Convenience Amount*, and irrevocably and unconditionally renounces and waives any right to claim the *Backward Looking Termination for Convenience Amount*.

Date:	24	October	2017	 		
Propos	ser: WV8	3 East End Pa	artners	 		
Signati	ure:	<u> </u>	<u>Jen</u>			
Title: A	Mithorize	ed Representa	ative			

## EXHIBIT 2-K

## EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

[attached]

The undersigned certifies on behalf of WVB East End Partners, LLC, that: [check one of the following boxes] It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs). It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs). [check one of the following boxes] It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246. It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements. Signature:

N/A

If not Developer, relationship to Developer:

The undersigned certifies on behalf of WI East End, LLC that: [check one of the following boxes] It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).  $\square$ It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs). [check one of the following boxes] W It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246. It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements. Equity Member If not Developer, relationship to Developer:

The undersigned certifies on behalf of VINCI Concessions Investments USA Inc. that: [check one of the following boxes] It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs). L. It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs). [check one of the following boxes]  $\square$ It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246. It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements. Signature: Signature: Title: Brenident Date: December 27, 2012 N/A If not Developer, relationship to Developer:

The undersigned certifies on behalf of Bilfinger East End Holdings Inc. that: [check one of the following boxes] It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs). N It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs). [check one of the following boxes] V It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246. It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements. Signature: Title: PREIDENT Date: <u>Decouzer CF, 2012</u> Equity Member If not Developer, relationship to Developer:

[To be executed by the Developer, Equity Members, Major Participants¹ and proposed Contractors]

	The undersigned certifies on behalf of <u>Walsh Construction Company-Vinci CGP</u> <u>Construction Joint Venture</u> , that:	
	(Name of entity making certification)	
[check	k one of the following boxes]	
Ø	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).	
	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).	
[checl	k one of the following boxes]	
	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.	
	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.	
	·	
	Title: <u>Bisinesi Group Leeder</u>	
	Date:	
If not D	eveloper, relationship to Developer: Design-Build Contractor	

<sup>&</sup>lt;sup>1</sup> as Equity Member, Major Participant are defined in the ITP.

	e executed by the Developer, Equity Members, Major Participants <sup>1</sup> and proposed actors]
The u	ndersigned certifies on behalf of <u>Walsh Construction Company</u> , that: (Name of entity making certification)
[checl	k one of the following boxes]
	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).
	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).
[checl	k one of the following boxes}
	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.
	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.
	Title: President, Walsh Construction Company
	Date: 12/19/2012
lf not D	eveloper, relationship to Developer:  Design-Build Contractor Joint Venture  Member

<sup>&</sup>lt;sup>1</sup> as Equity Member, Major Participant are defined in the ITP.

-	e executed by the Developer, Equity Members, Major Participants <sup>1</sup> and proposed ractors]
The (	undersigned certifies on behalf of <u>Vinci Construction Grands Projets</u> , that:  (Name of entity making certification)
[chec	ck one of the following boxes]
	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).
	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).
[chec	ck one of the following boxes]
	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.
Ø	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.  Signature:
	Title: <u>Director, Martin Accessos</u>
	Date: <u>/2//3//3</u>
If not	Developer, relationship to Developer: Design-Build Contractor Joint Venture  Member

<sup>&</sup>lt;sup>1</sup> as Equity Member, Major Participant are defined in the ITP.

[To be executed by the Developer, Equity Members, Major Participants<sup>1</sup> and proposed Contractors]

The undersigned certifies on behalf of <u>Jacobs Engineering Group, Inc.</u>, that: (Name of entity making certification)

<sup>&</sup>lt;sup>1</sup> as Equity Member, Major Participant are defined in the ITP.

To be executed by the Developer, Equity Members, Major Participants<sup>1</sup> and proposed Contractors? The undersigned certifies on behalf of International Bridge Technologies, Inc. , that: (Name of entity making certification) [check one of the following boxes] It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs). 図 It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs). [check one of the following boxes] It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246. M It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements. Signature: 7762 Contractor\_\_\_\_\_ If not Developer, relationship to Developer:

<sup>&</sup>lt;sup>1</sup> as Equity Member, Major Participant are defined in the ITP.

	executed by the Developer, Equity Members, Major Participants' and proposed actors]		
The u	ndersigned certifies on behalf of <u>Guthrie/Mayes</u> , that: (Name of entity making certification)		
[check	one of the following boxes]		
	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).		
Ø	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).		
[check	[check one of the following boxes]		
Ø	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.		
	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.		
	Title: 1811/1942		
	Date: /2////2		
If not D	eveloper, relationship to Developer: Contractor		
If not D	eveloper, relationship to Developer: Contractor		

<sup>&</sup>lt;sup>1</sup> as Equity Member, Major Participant are defined in the ITP.

*	e executed by the Developer, Equity Members, Major Participants' and proposed actors]
The u	ndersigned certifies on behalf of <u>Third Rock Consultants LLC</u> , that: (Name of entity making certification)
[checi	k one of the following boxes]
	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).
	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).
[checi	k one of the following boxes]
	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.
	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.  Signature:
	Title: President
	Date: 12-17-12-
If not C	Developer, relationship to Developer: Contractor

<sup>&</sup>lt;sup>1</sup> as Equity Member, Major Participant are defined in the ITP.

••	e executed by the Developer, Equity actors]	Members, Major Participants' and proposed
The u	ndersigned certifies on behalf of <u>Jar</u>	mes H. Drew, Corp, that: (Name of entity making certification)
[checl	k one of the following boxes]	
Ø		each establishment affirmative action :60-2 (Affirmative Action Programs).
	It is not subject to the requirements under 41 CFR Part 60-2 (Affirmativ	s to develop an affirmative action program re Action Programs).
[checi	k one of the following boxes]	
	, , ,	s contract or subcontract subject to the equal ecutive Orders 10925, 11114 or 11246.
M	opportunity clause described in Exwhere required, it has filed with the the Office of Federal Contract Conadministering agency, or the forme Employment Opportunity, all report	ntract or subcontract subject to the equal ecutive Orders 10925, 11114 or 11246 and, a Joint Reporting Committee, the Director of appliance, a Federal Government contracting or er President's Committee on Equal ts due under the applicable filing requirements.
		Gene Lindley, C.O.O.
		December 17, 2012
If not D	Developer, relationship to Developer:	Contractor
1 as E	 Equity Member, Major Participant an	e defined in the ITP.

[To be executed by the Developer, Equity Members, Major Participants1 and proposed Contractors1 The undersigned certifies on behalf of Advitam, Inc. that: (Name of entity making certification) [check one of the following boxes]  $\boxtimes$ It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs). It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs). [check one of the following boxes] M It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246. It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements. Signature: Title: <u>Coo</u> Date: (2 / 17/2 to (2 Contractor If not Developer, relationship to Developer:

<sup>&</sup>lt;sup>1</sup> as Equity Member, Major Participant are defined in the ITP.

-	executed by the Developer, Equity Members, Major Participants <sup>1</sup> and proposed actors]
The ur	ndersigned certifies on behalf of <u>C. Lee Construction</u> , that:  (Name of entity making certification)
[check	one of the following boxes]
Ď	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).
	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).
[check	one of the following boxes]
	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.
Q	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.
	Signature:
	Title: <u>President</u>
	Date:
If not D	eveloper, relationship to Developer: Contractor

¹ as Equity Member, Major Participant are defined in the ITP.

~	e executed by the Developer, Equity Members, Major Participants' and proposed ractors]
The i	undersigned certifies on behalf of <u>Messier &amp; Associates, Inc.</u> , that:  (Name of entity making certification)
[chec	ck one of the following boxes]
M	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).
	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).
[chec	ck one of the following boxes]
	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.
	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.  Signature:
	Title: CEO
	Date: 12/13/12
If not	Developer, relationship to Developer: Contractor

<sup>&</sup>lt;sup>1</sup> as Equity Member, Major Participant are defined in the ITP.

-	e executed by the Developer, Equity Members, Major Participants <sup>1</sup> and proposed actors]
The u	ndersigned certifies on behalf of <u>American Structurepoint, Inc.</u> , that: (Name of entity making certification)
[checi	k one of the following boxes]
$\boxtimes$	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).
	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).
[checi	k one of the following boxes]
	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.
	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.
	Signature: LAE Carried
	Title: Vice President
	Date: December 17, 2012
lf not D	Developer, relationship to Developer: Contractor

<sup>&</sup>lt;sup>1</sup> as Equity Member, Major Participant are defined in the ITP.

To be executed by the Developer, Equity Members, Major Participants<sup>1</sup> and proposed Contractors] The undersigned certifies on behalf of Earth Exploration, Inc. , that: (Name of entity making certification) [check one of the following boxes]  $\boxtimes$ It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs). It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs). [check one of the following boxes] It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.  $\boxtimes$ It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements. Signature: Johnaf. Thu Title: HR/Office Manager Date: \_\_\_\_\_12/17/12 Contractor If not Developer, relationship to Developer:

<sup>&</sup>lt;sup>1</sup> as Equity Member, Major Participant are defined in the ITP.

	e executed by the Developer, Equity Members, Major Participants' and proposed actors]	
The u	ndersigned certifies on behalf of <u>RWDI</u> , that: (Name of entity making certification)	
[checl	cone of the following boxes]	
	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).	
D/	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).	
[check one of the following boxes]		
Ø	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.	
	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.  Signature:	
	Title: Principal / Caenaral Manager	
	Date: <u>Vecsimber 19, 2012</u>	
If not Developer, relationship to Developer: Contractor		

<sup>&</sup>lt;sup>1</sup> as Equity Member, Major Participant are defined in the ITP.

-	e executed by the Developer, Equity Members, Major Participants <sup>1</sup> and proposed actors]	
The u	ndersigned certifies on behalf of <u>Stantec Consulting Services Inc.</u> , that:  (Name of entity making certification)	
(checi	k one of the following boxes]	
$\boxtimes$	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).	
	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).	
[check one of the following boxes]		
	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.	
	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.  Signature:	
	Title: Principal	
	Date: December 17, 2012	
If not Developer, relationship to Developer: Contractor		

<sup>&</sup>lt;sup>1</sup> as Equity Member, Major Participant are defined in the ITP.

To be executed by the Developer, Equity Members, Major Participants and proposed Contractors? The undersigned certifies on behalf of Buckland & Taylor Ltd. , that: (Name of entity making certification) [check one of the following boxes] It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs). 冈 It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs). [check one of the following boxes] It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.  $\boxtimes$ It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and. where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing\_requirements. Signature: Name: Steve Hunt, M.Eng., P.Eng. Title: President & CEO Date: 2012 December 14

Contractor

If not Developer, relationship to Developer:

<sup>&</sup>lt;sup>1</sup> as Equity Member, Major Participant are defined in the ITP.

*	e executed by the Developer, Equity Members, Major Participants' and proposed actors]
The u	ndersigned certifies on behalf of <u>MacDonald Architects</u> , that:  (Name of entity making certification)
[checl	k one of the following boxes]
	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).
Х□	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).
[checi	k one of the following boxes]
X	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.
	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.
	Signature:
	Title: Principal
	Date: December 19, 2012
If not D	Developer, relationship to Developer: Contractor

<sup>&</sup>lt;sup>1</sup> as Equity Member, Major Participant are defined in the ITP.

•	actors]
The u	ndersigned certifies on behalf of <u>CARMAN</u> , that: (Name of entity making certification)
[checl	cone of the following boxes]
	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).
	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).
[chec	k one of the following boxes]
	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.
	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.  Signature:
	Title: <u>President/\$r. Principal</u>
	Date: <u>December 15, 2012</u>
If not D	Peveloper, relationship to Developer: Contractor
	······································

<sup>&</sup>lt;sup>1</sup> as Equity Member, Major Participant are defined in the ITP.

# FORM O

To be executed by the Proposer, Equity Members, Major Participants and proposed Contractors]
The undersigned certifies on behalf of $\frac{\sqrt{B}}{\sqrt{B}}$ $\frac{\sqrt{B}}{\sqrt{B}}$ $\frac{\sqrt{B}}{\sqrt{B}}$ . that: (Name of entity making certification)
check one of the following boxes)
It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).
It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).
check one of the following boxes) /
It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.
It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.
Signature: <u>A. A. Harring</u> Title: <u>Population</u> A. Harring Response to how
Date: 36 October 2012
f not Proposer, relationship to Proposer:

<u>Mote</u>: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filled the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

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# <u>FORM Q</u>

	e executed by the Proposer, Equity Members, Major Participants and proposed ractors]
The t	indersigned certifies on behalf of <u>Walsh Investors, LLC</u> , that (Name of entity making certification)
{chec	k one of the following boxes]
Ø	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).
	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).
[chec	nk one of the following boxes]
	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.
	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.  Signature:
	Title: <u>Manager, Walsh Investors, LLC</u>
	Date: <u>10/17/2012</u>
If not	Proposer, relationship to Proposer: <u>Equity Member</u>

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director. Office of Federal Contract Compliance, U.S. Department of Labor.

#### FORM Q

#### EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

[To be executed by the Proposer, Equity Members, Major Participants and proposed Contractors? The undersigned certifies on behalf of <u>Vinci Cancerrians SAS</u>, that: (check one of the following boxes) it has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs). It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs). [check one of the following boxes] it has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246, It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements. Signature: <u>14 Land Verstof</u> Title: <u>PROJECT DIRECTOR NOBINI AMERICA</u> Date: 26 Oxfolox 2012 If not Proposer, relationship to Proposer: <u>Equity</u> Member

<u>Note</u>: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

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# FORM O

#### EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

	e executed by the Proposer, ractors]	Equity Members, Major P	articipants	and proposed IJ
	The undersigned certifies on behalf of Bilfinger Berger Project-Investments International Holding GmbH, that:		tinents International	
[chec	k one of the following boxes			
	It has developed and has o pursuant to 41 CFR Part 60			ve action programs
Z	If is not subject to the requi CFR Part 60-2 (Affirmative		irmative ac	lion program under 41
[ohec	sk one of the following boxes,	*		
Ø	It has not participated in a opportunity clause describe			
	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.			
	Ar-		) (j.	and the second
Nicky	Dawson		Oirk Sähng	en
Man	aging Director		Managing	Director
Date: <u>22.000863.</u> ,2012				
Billinger Berger Project Investments International Holding GmbH, Equity Member				
Indiana	s Frozoica Authority	Firm O		Request for Proposals

Page 1 of 2

East End Crassing

11P Forms

Addendom #0

<u>More:</u> The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

## FORM Q

## EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

[To be executed by the Proposer, Equity Members, Major Participants and proposed Contractors]

	lersigned certifies on behalf of <u>Walsh Construction Company-Vinci CGP Constructio</u> inture, that:		
	(Name of entity making certification)		
{chec	one of the following boxes]		
	it has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).		
	is not subject to the requirements to develop an affirmative action program under 41 FR Part 60-2 (Affirmative Action Programs).		
[chec	one of the following boxes]		
	has not participated in a previous contract or subcontract subject to the equal apportunity clause described in Executive Orders 10925, 11114 or 11246,		
	thas participated in a previous contract or subcontract subject to the equal opportunit lause described in Executive Orders 10925, 11114 or 11246 and, where required, it ias filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or ne former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.  Signature:		
	Title: ちぬ V. P.		
	Date: <u>10 ~ 1<sup>2</sup>1 - 7≤12.</u>		
lf not	roposer, relationship to Proposer: <u>Design-Build Contractor</u>		

<u>Note</u>: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

# FORM Q

	e executed by the Proposer, Equity Members, Major Participants and proposed ractors]
The i	undersigned certifies on behalf of <u>Waish Construction Company</u> , that:  (Name of entity making certification)
[chec	ck one of the following boxes]
	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).
	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).
[chec	ck one of the following boxes]
	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.
	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.  Signature:
	Title: President, Walsh Construction Company
	Date: <u>10/17/2012</u>
If no	t Proposer, relationship to Proposer: <u>Design-Build Contractor Joint Venture</u> <u>Member</u>

<u>Note</u>: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

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# FORM Q

	executed by the Proposer, Equity Members, Major Participants and proposed actors]
The u	ndersigned certifies on behalf of <u>Vinci Construction Grands Projets</u> , that: (Name of entity making certification)
[check	cone of the following boxes]
卣	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).
	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).
[check	cone of the fallowing boxes]
	It has not participated in a previous confract or subconfract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.
	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.  Signature:  Title: Supplicable file Accelor of the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportunity and predict to the equal opportu
	Date: <u>Ockober 19th 2012</u>
If not I	Proposer, relationship to Proposer: <u>Design-Build Contractor Joint Venture Member</u>

<u>Note</u>: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

	e executed by the Proposer, Equity Members, Major Participants and proposed actors]
The u	ndersigned certifies on behalf of <u>Jacobs Engineering Group, Inc.</u> , that: (Name of entity making certification)
[checl	cone of the following boxes]
	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).
	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).
[checl	cone of the following boxes]
	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.
$\boxtimes$	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.  Signature:
	Title: <u>Vice President</u> Date: <u>October</u> , 2012
lf not l	Proposer, relationship to Proposer: <u>Lead Engineer</u>

<u>Note</u>: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

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#### EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

[To be executed by the Proposer, Equity Members, Major Participants and proposed Confractors]

The	undersigned certifies on behalf of International Bridge Technologies, Inc., that:	
	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).	
	It is not subject to the requirements to develop an affirmative action program under 41 GFR Part 60-2 (Affirmative Action Programs).	
	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.	
	It has participated in a previous contract or subcontract subject to the equal opportunit clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.	
	Signature:	
	Title:	
	Oate: Oi Haw Gragest for 2	
lf rioi	Proposer, relationship to Proposer: Decears Sedimen	

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

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	pe executed by the Proposer, Equity Members, Major Participants and proposed ractors)
The	unriorsignad cortifies on behalf ofGuthrie/Mayes & Associates, that: (Name of entity making certification)
Įche	ok one of the following boxos)
	it has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).
28	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).
(che	ck one of the following boxes)
X	It itas not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.
	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filled with the Joint Reporting Committee, the Director of the Office of Federal Contract Compilance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.  Signature:
	TRIGE:
	Oate: <u>/////2</u>
if no	t Proposer, relationship to Proposer: <u>Padalat, III plantate beat I zarala</u> webs

<u>Mate</u>: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report upvering the definquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

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Bant Bad Cleaning

Form G Page 2 of 2

#### EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

(To be executed by the Proposor, Equity Members, Major Participants and proposed Contractors! The undersigned certifies on behalf of \_\_\_Third Rock Consultants LLC \_\_\_\_, that (Name of entity making certification) Icheck one of the following boxes) It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs). It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs). (check one of the following boxes) It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246. It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 111114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements Signature: ULL D— Title: PRS : Us-D Date: 11-2-/2-

If not Proposer, relationship to Proposer: Subcontractor

<u>Mote</u>: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.6. (Generally, only contracts of \$10.000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

# FORM O

•	e executed by the Proposer, Equity Members, Major Participants and proposed actors]
The t	indersigned certifies on behalf of <u>James H Drew Corporation</u> , that (Name of entity making certification)
(chec	k one of the following boxes;
	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).
	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).
[chec	k one of the following boxes;
	It has not participated in a previous contract or subcontract subject to the equal , opportunity clause described in Executive Orders 10925, 11114 or 11246.
Ø	it has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filled with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.  Signature:
	Title: <u>Gene Lindley, C.O.O.</u>
	Date: <u>November 1, 2012</u>
lf not	Proposer, relationship to Proposer: Open Calabia

<u>Mote</u>: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Fighway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

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#### EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

(To be executed by the Proposer, Equity Members, Major Participants and proposed

Contractors? The undersioned certifies on behalf of Advitam, Inc. that: (Name of entity making certification) faneck one of the following boxes): It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs). It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs). Tcheck and of the following boxes! It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11240. It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements. Signature: Title: COO. Advitam, Inc. Date: 11/1/2012 If not Proposer, relationship to Proposer: \_Subcontractor\_\_\_\_\_

<u>Note:</u> The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1 7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filled the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

# EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

(To be executed by the Proposer, Equity Members, Major Pericipants and proposed Centractors)

Conti	
The :	indersigned cerubes on behalf of <u>C. Lee Constantion Services, lac</u> that. (Name of entity making certification)
johec	sk one of the following boxes)
Ž,	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs)
1	It is not subject to the requirements to develop an affirmative action program under 41. CFR Part 60-2 (Affirmative Action Programs)
fottes	ts one of the following boxes;
Sec.	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11248
	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11245 and, where required it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency or the former President's Committee on Equal Employment Opportunity, all reports due cinder the applicable filing requirements.
	Signature:
	Title: <u>President</u>
	Date <u>11-2-17</u>
li noi	Proposer, relationship to Proposer: Proposed Contractor

Note: The above condication is required by the Educat Emproyment Opportunity Regulations of the Secretary of Labor (4.) CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 90-1 7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor

	be executed by the Proposer, Equity Members, Major Participants and proposed tractors)	
The	undersigned certifies on behalf of <u>Messier &amp; Associates Inc</u> , that:  (Name of entity making certification)	
(che	ck one of the following bexas]	
X	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).	
	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).	
<i>[che</i>	ck one of the following boxes)	
	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.	
	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements  Signature:  CEO	
	Date: <u>11/1/12</u>	
lf no	t Proposer, relationship to Proposer: <u>Proposed Contractor</u>	

<u>Mote</u>: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filled the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

#### EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

(To be executed by the Proposer, Equity Members, Major Participants and proposed Contractors)

The undersigned certifies on behalf of American Structurepoint, inc., that: (Name of onlity making certification)

(che	ck one of the following boxes[	
	It has developed and has on life at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).	
	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).	
[che	ck one of the following baxes)	
	it has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.	
	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable fling requirements	
	Signature: <u>La A.C. La</u>	
	Title: <u>Mice President</u>	
	Date: <u>November 2, 2012</u>	
II no	t Proposer, relationship to Proposec <u>Subconsultant</u>	

<u>Moto</u>: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

# FORMO

	e executed by the Proposer, Equity Members, Major Participants and proposed actors)
The u	mdersigned certifies on behalf of <u>Earth Explayation Tisc</u> that: (Name of entitly making conflication)
[chec	k one of the following boxes}
	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).
	If is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).
lchec	k one of the following boxes)
) Januaryan	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.
¥	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.
	Signature: <u>Whate J. Wee</u>
	Title: <u>EEa Officer</u>
	Date:
If not:	Proposer, relationship to Proposer: HR / L. Hice. Maudger  Proposer, leasurer

<u>Note</u>: The above cartification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Correctly, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not iffed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the definiquent period or such other period specified by the Foderal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

#### EGUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

To be executed by the Proposer, Equity Members, Major Participants and proposed.

Oate: Assesse A Payer

If not Proposer, relationship to Proposer: <u>Sex seeks, & A. Wester Alleria.</u> Leeks,

has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due

<u>Mole</u>: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Corrently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

**3**.

	e executed by the Proposer, Equity Membors, Wajor Participants and proposed vectors)	
Tha c	indersigned certifies on behalf of <u>Stanier Consulting Services Inc.</u> , that: (Name of onlity daking condication)	
fehico	k orie of the following baxes)	
	It has developed and has on file at each establishment affirmative action programs persuant to 41 CFR Part 60-2 (Afirmative Action Programs).	
	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).	
johec	k one of the fallowing boxes)	
	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.	
	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.  Signature:	
	Title: <u>Principal</u>	
	Date: November 2, 2012	
If not	Proposer, relationship to Proposer: Geotechnical Consultant	

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 50-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 50-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the definquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

## FORM O

#### EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

[To be executed by the Proposer, Equity Members, Major Participants and proposed Contractors]

The undersigned cartifles on behalf of <u>Buckland & Taylor Ltd.</u>, that: (Name of entity making certification)

chec	ok one of the following boxes!
	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).
X	It is not subject to the requirements to develop an affirmative action program under 41 GFR Part 60-2 (Affirmative Action Programs).
ohed	ok one of the following boxes]
	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.
***	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.  Signature:
	Name: Steve Hunt, M.Eng., P.Eng.
	Title: <u>CEO/President</u>
	Date: 2012 November 2
lf no	t Proposer, relationship to Proposer: <u>Proposed Contractor</u>

<u>Nate</u>: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the definquent period or such other period specified by the Federal Highway Administration or by the Director. Office of Federal Contract Compliance, U.S. Department of Labor.

#### EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

(To be executed by the Proposer, Equity Members, Major Participants and proposed Contractors)

The	undersigned certifies on behalf of	MacDonald Architects, that: (Name of entity making certification)
fched	ck one of the following boxesf	
	It has developed and has on file a pursuant to 41 CFR Part 60-2 (All	it each establishment affirmative action programs firmative Action Programs).
XÎ	tt is not subject to the requiremen GFR Part 60-2 (Affirmative Action	ts to develop an affirmative action program under 41. Programs).
(che	ck one of the following baxes)	
8)		is contract or subcontract subject to the equal xecutive Orders 10925, 11114 or 11246.
	clause described in Executive Ordinas filed with the Joint Reporting Contract Compliance, a Federal C	ontract or subcontract subject to the equal opportunity ders 10925, 11114 or 11246 and, where required, it Committee, the Director of the Office of Federal Sovernment contracting or administering agency, or on Equal Employment Opportunity, all reports due ments.
	Signature	Johnstel frankterald.
	Title:	Principal
	Date	:November 1, 2012
lf no	i Proposer, relationship to Proposer	: <u>Deport 1 du Andre</u>

<u>Noto</u>: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filled the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

•	e executed by the Proposer, Equity Members, Major Participants and proposed ractors)
The	indersigned certifies on behalf of <u>CARMAN</u> , that: (Name of entity making certification)
]che(	sk one of the following boxes]
	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).
×	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).
[chec	ck one of the following boxes}
js.	It has not participated in a previous contract or subcontract subject to the equal apportunity clause described in Executive Orders 19926, 11114 or 11246.
	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11236 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.  Signature:  Title: President  Date: November 02, 2012
If no	Proposer, relationship to Proposer: subconsultant

<u>Mote</u>: The above conflication is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 50-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Preposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcentracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor

Note: The above certification is required by too Equal Employment Opportunity Regulations of the Secretary of Labor (41 CER 60-1.7(5)(1)), and must be submitted by Proposors only in connection with contracts which are subject to the equal epportunity clause. Contracts that are exempt from the sound opportunity clause are set forth in 41 CER 60-1.5. (Generally, only contracts of \$10.000 or tracker are exempt.)

Currently, Standard Form 100 (ELO-1) in the only report received by Executive Ordensia: (being implementing requisitions.

Proposers, Equity Numbers, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not fixed the required reports should note that 41 CFR 60-1,7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

	e executed by the Proposer, Equil ractors;	ly Members, Major Participants and pr	óposed
The undersigned certifies on behalf of		Haydon Bridge Company, Dic.	, that:
		(Name of entity making cartification	")
<i>[chec</i>	k one of the following boxes)		
	It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).		
	It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).		
<i>[chec</i>	k ane of the following boxes]		
	It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.		
X	It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.  Signature:		
	Tita	e: President	***************************************
	Dat	te: 11/2/12	<del>reconnected to the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of th</del>
if not	t Proposer, relationship to Proposo	er <u>Esboontractor</u>	

<u>Mote</u>: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

.

<u>Note:</u> The above cartification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of \$10,000 or under are exempt.)

Currently, Standard Form 109 (EEO-1) is the only report required by Exocutive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Contractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

#### EXHIBIT 2-L

## DEVELOPER'S PRELIMINARY DBE PERFORMANCE PLAN

[see Section 4.1.2 of Exhibit 2-E]

## EXHIBIT 2-M

## DBE CERTIFICATION

[attached]

#### DBE CERTIFICATION

#### DISADVANTAGED BUSINESS ENTERPRISES REQUIREMENTS

The following goal for participation by Disadvantaged Business Enterprises is established for professional services and construction work on the East End Crossing.

DBE

9%

#### **DBE** Certification

Developer certifies that (1) the above DBE goal will be met by obtaining commitments equal to or exceeding the DBE percentage or that the Developer will provide a good faith effort to substantiate the attempt to meet the goal; and (2) Developer will submit a final DBE Performance Plan meeting the requirements set forth in <u>Section 7.10.3</u> of the Agreement and the DBE Special Provisions attached as <u>Exhibit 7</u> to the Agreement.

Failure to submit the DBE Performance Plan will be considered a breach of the requirements of the RFP. As a result, the Proposal Bond provided by Developer's affiliated Proposer entity will become property of IFA and Developer (and its affiliated Proposer entity, and its members) will be precluded from participating in any reprocurement of the Agreement for the East End Crossing.

Sidney Florey, Project Executive

fór WVB East End Partners, LLC

#### FORM H

#### DBE CERTIFICATION

#### DISADVANTAGED BUSINESS ENTERPRISES REQUIREMENTS

The following goal for participation by Disadvantaged Business Enterprises is established for professional services and construction work on the East End Crossing.

DBE

9%

#### DBE Certification

By signing the Proposal, the Proposer certifies that (1) the above DBE goal will be met by obtaining commitments equal to or exceeding the DBE percentage or that the Proposer will provide a good faith effort to substantiate the attempt to meet the goal; and (2) if awarded the Agreement, the Developer will submit a final DBE Performance Planmeeting the requirements set forth in Section 7.10.3 of the Agreement and the DBE Special Provisions attached as Exhibit 7 to the Agreement.

Failure to submit the DBE Performance Plan will be considered a breach of the requirements of the RFP. As a result, the Proposal Bond provided by the Proposer will become properly of IFA and the Proposer will be precluded from participating in any reprocurement of the Agreement for the East End Crossing.

Sione R. H. Congress of Landson States of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the Congress of the

#### EXHIBIT 2-N

## DEVELOPER'S PRELIMINARY WORKFORCE DIVERSITY AND SMALL BUSINESS PERFORMANCE PLAN

[see Section 4.1.3 of Exhibit 2-E]



U.S. Department of Transportation

Federal Transit Administration Region V 200 West Adams St., Suite 320 Chicago, IL 60506-5253 312-353-2789 312-686-0351 (fax) Federal Highway Administration IN Division 575 N. Pennsylvania St., Rm. 254 Indianapolis, IN 46204-1576

SEP 2 2 2005

Earl A. Goode Commissioner Indiana Department of Administration Indiana Government Center South 402 West Washington Street Room W479 Indianapolis, IN 46204

RE: Buy Indiana Initiative

Dear Mr. Goode:

or. D. Talinas Initiativa

The United States Department of Transportation received a copy of the Indiana Department of Administration's letter dated June 13, 2005, addressed to Business Owners. The letter explains Indiana Executive Order 05-05 and its goal to ensure that state agencies procure ninety cents of each dollar from Indiana businesses. We understand that Indiana may wish to see a larger percentage of state procurements be awarded to Indiana businesses. Federal law, however, prohibits geographic preferences in third party procurements that use federal funds. If any of the procurements use federal funds, then the state agencies must comply with federal requirements.

The common grant rule for non-state, direct recipients of federal funds, 49 C.F.R. § 18.36(c)(2), prohibits local geographic preferences finding that geographic preferences violate the requirement for full and open competition. Federal law governing contracting in public transit, 49 U.S.C. § 5323(h)(2) states that a grant may not be used to support a procurement that uses an exclusionary or discriminatory specification. In addition, Federal laws governing highway contracting, 23 U.S.C. § 112(b) and 23 C.F.R. § 635.104, require competition for all recipients of federal funds in highway construction contracts to prevent discrimination against contractors. Geographic preferences in third party procurements are exclusionary and anti-competitive. Therefore, if any federal funds are used in state agency contracts, the Indiana Executive Order cannot apply.

In addition, we note that your state implements a non-federal Minority and Women-Owned Business Enterprise Program on its contracts. Please be aware that the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) do not permit states to impose state or local affirmative action program requirements such as Indiana's Minority and Women-Owned Business Enterprise Program on contracts utilizing federal funds. Instead, recipients are required to implement the federal disadvantaged business enterprise program requirements as a means of ensuring that minority and women owned businesses have a fair opportunity to participate in US DOT-assisted contracts.

Should you have any questions regarding this matter, please feel free to contact either Nancy-Ellen Zusman at FTA or Lisa MacPhee at FHWA. Ms. Zusman can be reached at 312-353-2789 and Ms. MacPhee can be reached at 202-366-1392.

Sincerely yours,

Donald Gismondi

Acting Regional Administrator

Directo Dismond.

Federal Transit Administration

Robert F. Tally, Jr.

Division Administrator

Federal Highway Administration



## DEPARTMENT OF ADMINISTRATION Commissioner's Office

Indiana Government Center South 402 West Washington Street, Room W469 Indianapolis, IN 46204

# Findings Concerning MBE/WBE Goals on the Ohio River Bridges Project - East End Crossing

WHEREAS, the State of Indiana and the State of Kentucky have been working with the Federal Highway Administration (FHWA) since 1998 to study, select, finance and construct a project to address cross-river mobility issues in the Louisville metropolitan area; and

WHEREAS, in 2003, the FHWA approved a Record of Decision selecting a two-bridge alternative (the Ohio River Bridges Project or "ORBP"), a Supplemental Final Environmental Impact Statement was published on April 20, 2012, and FHWA approved the revised Record of Decision on June 20, 2012; and

WHEREAS, the ORBP consists of two new crossings over the Ohio River, one adjacent to the existing Kennedy Bridge (I-65) in downtown Louisville (the "Downtown Crossing") and one several miles to the east between Utica, Indiana and Prospect, Kentucky (the "East End Crossing"); and

WHEREAS, Governor Mitch Daniels of Indiana and Governor Steve Brashear of Kentucky reached an agreement to fund the ORPB in March 2012 under which Indiana will oversee financing and construction of the East End Crossing; and

WHEREAS, the Indiana Finance Authority (IFA) and the Indiana Department of Transportation (INDOT) are cooperating to construct the East End Crossing between the Lee Hamilton Expressway in Indiana and the Gene Snyder Freeway in Kentucky, completing a loop around the east end of the Louisville metropolitan area; and

WHEREAS, IFA and INDOT plan to use a private sector team for financing, design, construction and long-term maintenance of the East End Crossing, with the exception that portions in Kentucky will not be part of the long-term maintenance, and to that end have chosen four teams to respond to the Request for Proposals (RFP); and

WHEREAS, IFA is proceeding with procurement of the East End Crossing under I.C. 8-15.5, which governs procurement and construction of tolled projects being constructed by IFA as Public Private Partnerships; and

WHEREAS, I.C. 8-15.5-6-3 provides that any contractor or operator building a tolled project under I.C. 8-15.5 is subject to the Minority and Women's Business Enterprise (M/WBE) program (25 I.A.C. 5) concerning equal opportunities for Minority Business Enterprises and Women's Business Enterprises to participate in procurement and contracting processes; and

WHEREAS, federal highway funds have been expended in the design and development of the East End Crossing, and INDOT and IFA anticipate that subject to the conditions of a Public-Private Partnership Agreement governing construction, operation and maintenance of the East End Crossing, additional

federal funds will be used to support construction, maintenance and operation of the East End Crossing in the future; and

WHEREAS, because federal highway funds are being utilized for the East End Crossing, the requirements of the federal Disadvantaged Business Enterprise (DBE) program (49 CFR Part 26) apply to the procurement and construction of the East End Crossing; and

WHEREAS, as explained in the attached letter, the FHWA Indiana Division has determined that the application of M/WBE goals on federal-aid projects is not acceptable and would jeopardize federal funding participation in the project; and

WHEREAS, INDOT has provided and will continue to provide robust outreach and intensive business training to DBEs and potential DBEs throughout the State of Indiana to encourage Indiana companies to participate in the DBE program and to provide these companies with the tools to be successful on the East End Crossing and other INDOT projects; and

WHEREAS, the certification requirements for DBEs under the federal DBE program include the certification requirements for MBEs and WBEs in the State M/WBE program, as well as other federal requirements; therefore, most DBEs certified in Indiana qualify as MBEs or WBEs in accordance with 25 IAC 5; and

WHEREAS, the vast majority (currently seventy-five percent (75%)) of DBEs certified in Indiana are DBEs located in Indiana so IDOA, IFA and INDOT anticipate many Indiana companies will be utilized to meet the DBE goal for the East End Crossing; and

WHEREAS, INDOT and IFA have set a nine percent (9%) DBE goal on the design, development and construction of the East End Crossing and have required the proposer teams on the RFP to submit a detailed DBE Performance Plan and a Workforce Diversity and Small Business Performance Plan with their proposals; and

WHEREAS, in addition to the nine percent (9%) DBE goal set on the East End Crossing, Section 7.12 of the Public-Private Agreement in the Request for Proposals for the East End Crossing encourages the Developer to "make additional efforts to solicit and recruit minority and women-owned businesses and small businesses to participate in the East End Crossing;" and

WHEREAS, because of the additional efforts being made to maximize DBE participation in the East End Crossing and in the ORBP as a whole, IDOA, IFA and INDOT are confident that MBEs, WBEs, DBEs and Indiana companies will find opportunities for participation in the construction of both bridges; and

WHEREAS, under 25 IAC 5-7-3(f), M/WBE participation goals may vary on individual contracts so long as the combined participation on other State contracts meets the annual goal for overall MBE and WBE participation;

NOW, THEREFORE, the Commissioner issues the following findings:

- 1.) As the Commissioner has recognized on other State highway projects involving federal highway funds, the FHWA has found that State M/WBE goals may not be applied to federally-funded highway projects subject to DBE goals and requirements. (See attached letter.)
- 2.) To apply an M/WBE goal of more than zero percent (0%) on the East End Crossing would contravene federal regulation and guidance and could jeopardize federal funding participation on the East End Crossing.
- 3.) IDOA shares INDOT's confidence that the DBE outreach and training efforts undertaken by INDOT will provide ample opportunities for participation of DBEs, MBEs, WBEs, and Indiana companies in the construction of the East End Crossing, IDOA has agreed to work with INDOT to assist certified MBE and WBE firms in their pursuit of DBE certification. Furthermore, INDOT has set the DBE goal for the East End Crossing at nine percent (9%) of the Total Capital Cost for the design and construction portion of the East End Crossing.
- 4.) For these reasons and to ensure compliance with both State and federal law, the Commissioner finds that the M/WBE goal for the East End Crossing should be set at zero percent (0%).

Entered this 20th day of November, 2012.

Robert D. Wynkoop, Commission

Department of Administration

## EXHIBIT 2-0

## **BUY AMERICA CERTIFICATION**

[attached]

#### **BUY AMERICA CERTIFICATION**

The undersigned Developer hereby certifies on behalf of itself and all contractors (at all tiers) the following with regard to the East End Crossing:

- a. Developer shall comply with the Federal Highway Administration ("FHWA") Buy America Requirements of 23 CFR 635.410, which permits FHWA participation in the Agreement only if domestic steel and iron will be used on the East End Crossing. To be considered domestic, all steel and iron used and all products manufactured from steel and iron must be produced in the United States and all manufacturing processes, including application of a coating, for these materials must occur in the United States. Coating includes all processes that protect or enhance the value of the material to which the coating is applied. This requirement does not preclude a minimal use of foreign steel and iron materials, provided the cost of such materials does not exceed 0.1% of the design-build contract price.
- b. A false certification is a criminal act in violation of 18 U.S.C. 1001. Should this Agreement be investigated, Developer has the burden of proof to establish that it is in compliance.
- c. At Developer's request, IFA may, but is not obligated to, seek a waiver of Buy America requirements if grounds for the waiver exist. However, Developer certifies that it will comply with the applicable Buy America requirements if a waiver of those requirements is not available or not pursued by IFA.

Date: December 27, 2012

Signature:

Name: Signey Florey

Title: Project Executive

Developer's Name: WVB East End Partners, LLC

#### FORM G

#### BUY AMERICA CERTIFICATION

(To be signed by authorized signatory(les) of Proposer)

The undersigned Proposer hereby certifies on behalf of itself and all contractors (at all tiers) the following with regard to the East End Crossing:

- a. Proposer shall comply with the Federal Highway Administration ("FHWA") Buy America Requirements of 23 CFR 635.410, which permits FHWA participation in the Agreement only if domestic steel and iron will be used on the East End Crossing. To be considered domestic, all steel and iron used and all products manufactured from steel and iron must be produced in the United States and all manufacturing processes, including application of a coating, for these materials must occur in the United States. Coating includes all processes that protect or enhance the value of the material to which the coating is applied. This requirement does not preclude a minimal use of foreign steel and iron materials, provided the cost of such materials does not exceed 0.1% of the design-build contract price.
- b. A false certification is a criminal act in violation of 18 U.S.C. 1001. Should this Agreement be investigated, Proposer has the burden of proof to establish that it is in compliance.
- c. At Proposer's request, IFA may, but is not obligated to, seek a waiver of Buy America requirements if grounds for the waiver exist. However, Proposer certifies that it will comply with the applicable Buy America requirements if a waiver of those requirements is not available or not pursued by IFA.

Date:	24 Oc	tober	2012		
Signature	:	7. "	<i>).l.</i>	and the second second	
Title: _ૠ	Thou; US	Zeore.	rentative		***********

## EXHIBIT 2-P

## **USE OF CONTRACT FUNDS FOR LOBBYING CERTIFICATION**

[attached]

The undersigned Developer certifies on behalf of itself the following:

- The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
  - b. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions, and shall include a copy of said form in its proposal or bid, or submit it with the executed Agreement or Subcontract.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- The undersigned shall require that the language of this certification be included in all lower tier subcontracts which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.
- The undersigned certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the undersigned understands and agrees that the provisions of 31 U.S.C. §3801, et seq., apply to this certification and disclosure, if any.

Date: December 27, 2012

Firm/Entity: WVB East End Partners, LLC

Signature:

Name: Sidney Florey

Title: Project Executive

Developer: WVB East End Partners, LLC

Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.

The undersigned Equity Member certifies on behalf of itself the following:

- The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
  - b. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions, and shall include a copy of said form in its proposal or bid, or submit it with the executed Agreement or Subcontract.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- The undersigned shall require that the language of this certification be included in all lower tier subcontracts which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.
- The undersigned certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the undersigned understands and agrees that the provisions of 31 U.S.C. §3801, et seq., apply to this certification and disclosure, if any.

Date:	December 27, 2012
Firm/Entity:	WI East End Partners, LLC
Signature:	Tregat liambions
Name:	Gregory A. Cambrone
Title:	Monager
	V
Developer:	WVB East End Partners, LLC

Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.

The undersigned Equity Member certifies on behalf of itself the following:

- The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
  - b. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions, and shall include a copy of said form in its proposal or bid, or submit it with the executed Agreement or Subcontract.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- The undersigned shall require that the language of this certification be included in all lower tier subcontracts which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.
- 4. The undersigned certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the undersigned understands and agrees that the provisions of 31 U.S.C. §3801, et seq., apply to this certification and disclosure, if any.

Date:	December 27, 2012
Firm/Entity:	VINCI Concessions Investments USA Inc.
Signature:	ر شام
Name:	Fadi SELWAN
Title:	President

Developer: WVB East End Partners, LLC

Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.

The undersigned Equity Member certifies on behalf of itself the following:

- The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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- 4. The undersigned certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the undersigned understands and agrees that the provisions of 31 U.S.C. §3801, et seq., apply to this certification and disclosure, if any.

Date:	December 27, 2012
Firm/Entity:	Bilfinger East End Holdings Inc.
Signature:	
Name:	DAMIAN JOY
Title:	MS DENT

Developer: WVB East End Partners, LLC

Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.

The undersigned Develop	er, Equity Member,	Major Participant X, , c	))
proposed Contractor	certifies on behalf of itself the	following:	

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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- The undersigned shall require that the language of this certification be included in all lower tier subcontracts which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.
- 4. The undersigned certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the undersigned understands and agrees that the provisions of 31 U.S.C. §3801, et seq., apply to this certification and disclosure, if any.

Date:
Firm/Entity: Walsh Construction-VCGP Construction Joint Venture
Signature: 1/34//A
Name: Brad Koester
Title: Bosiness Complemental
Developer: WVB East End Partners, LLC

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.]

[Copy this form and modify as needed for execution by Developer, Equity Members, Major Participants, and all proposed Contractors]

The undersigned Dev	veloper, E	Equity Memb	er,	Major Participant	<u> </u>	)r
proposed Contractor	certifies	on behalf of	itself the	following:		

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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Date:	<u> 1923;92</u>			*************************	***
Firm/Entit	y: <u>Walsh Cons</u>	truction Co	mpany	4	
Signature	: <u> </u>		<u> </u>	<u>), (154</u>	<b></b> .
Name: 🔔	<del>hadd Walsia</del>		**************		
Title: Des	Saraha .				
Develope	r: WVB East E	ind Partner	s, LLC	<b>.</b>	

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.]

[Copy this form and modify as needed for execution by Developer, Equity Members, Major Participants, and all proposed Contractors]

The undersigned Dev	/eloper, E	iquity Membe	r, l	Major P	'articipant	<u>X</u>	Oi
proposed Contractor	certifies of	on behalf of its	self the f	following	g:		

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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Date: <u>    2 / 19 / 12</u>	<u></u>
Firm/Entity: Vinci Constru	etion Grands Projets
Signature:	
Name: A Paragraphy	
Title: parda, Abdh Au	era.
Developer: WVB East Er	·

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.]

[Copy this form and modify as needed for execution by Developer, Equity Members, Major Participants, and all proposed Contractors]

The undersigned <u>Major Participant (Lead Engineer)</u> certifies on behalf of itself the following:

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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Date: <u>Dece</u>	<u>mber 27, 20</u>	12	***************************************	*********
Firm/Entity:	Jacobs En	gineerin	g Group, Inc.	
Signature:			Mass	
Name:	Perea	D.	BRETTE	
Title:	VICE	Pae	i) Ent	
Developer:	WVB East	End Par	tners, LLC	

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.]

[Copy this form and modify as needed for execution by Developer, Equity Members, Major Participants, and all proposed Contractors]

The undersigned Developer	Equity Member	, Major Participant	, or
proposed Contractor X	certifies on behalf of itself	the following:	

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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Date: 7 VECTINGER 2011
Firm/Entity: International Bridge Technologies, Inc.
Signature:
Name: Ufruit Thesi'r
Title: ((LE) 10547
Developer: WVB East End Partners, LLC

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[Copy this form and modify as needed for execution by Developer, Equity Members, Major Participants, and all proposed Contractors]

The undersigned Developer	, Equity Member_	, Major Participant, o
proposed Contractor X	certifies on behalf of its	self the following:

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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1 /
Date: 12//1//2
Firm/Entity: Guthrie/Mayes
Signature: ////////////////////////////////////
Name: <u>DAN HARTLAGE</u>
Title: <u> </u>

Developer: WVB East End Partners, LLC

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each

expenditure or failure.]

[Copy this form and modify as needed for execution by Developer, Equity Members, Major Participants, and all proposed Contractors]

The undersigned D	eveloper	Equity Member	, Major Participant _	, OI
proposed Contracto	or <u>X</u>	certifies on behalf of itself	f the following:	

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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Date:	12-17-12
Firm/Entity:	Third Rock Consultants LLC
Signature:	Molf D-
Name:	Molly F. Davis
Title:	President
Developer:	WVB East End Partners, LLC

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each

expenditure or failure.]

[Copy this form and modify as needed for execution by Developer, Equity Members, Major Participants, and all proposed Contractors]

The undersigned De	veloper,	Equity Memb	ier, Majo	or Participant _	, or
proposed Contractor	X certifie	s on behalf o	of itself the follo	owing:	

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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Date: <u>Dece</u>	ember 17, 2012
Firm/Entity	: James H Drew, Corp.
Signature:	Les Lley
Name:	Gene Lindley
Title:	C.O.O.
Developer:	WVB East End Partners, LLC

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.]

The undersigned Develope	r, Equity Member	, Major Participant	, or
proposed Contractor X	_certifies on behalf of itself	f the following:	

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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Date:	12/17/2012
Firm/Entity:	Advitam, Inc
Signature:	
Name:	Bounit Kroely
Title:	Coo
Developer:	WVB East End Partners, LLC

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.]

The undersigned Dev	veloper	, Equity Member	, Major Participant,	Of
proposed Contractor	<u>X</u>	certifies on behalf of itsel	f the following:	

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
  - b. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions, and shall include a copy of said form in its proposal or bid, or submit it with the executed Agreement or Subcontract.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- The undersigned shall require that the language of this certification be included in all lower tier subcontracts which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.
- 4. The undersigned certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the undersigned understands and agrees that the provisions of 31 U.S.C. §3801, et seq., apply to this certification and disclosure, if any.

Date:	12-21-12	
Firm/Entity: 9	C. Lee-Gonstruction	
Signature:		
Name:	Frederick B. Lee	
Title:	President	
	AB (F) F (F)	. ( ) -

Developer: WVB East End Partners, LLC

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.]

The undersigned Developer	, Equity Member,	Major Participant,	O:
proposed Contractor X	certifies on behalf of itself th	ie following:	

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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- 4. The undersigned certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the undersigned understands and agrees that the provisions of 31 U.S.C. §3801, et seq., apply to this certification and disclosure, if any.

Date: 12/13/12
Firm/Entity: Messier & Associates, Inc.
Signature: Jan Mugan
Name: Fernando Messier
Title: <u>(60</u>
Developer: WVB East End Partners, LLC

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.]

The undersigne	ed Developer	r, Equity Member, Major Participant _	, or
proposed Contr	ractor X	certifies on behalf of itself the following:	

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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Date: December 17, 2012
Firm/Entity: American Structurepoint, Inc.
Signature: Lad Elasid
Name: Cash E. Canfield, PE
Title: Vice President
Developer: WVB East End Partners, LLC

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.]

The undersigned Deve	loper Equ	ity Member	_, Major Participant	, or
proposed Contractor	X certifies or	n behalf of itself t	he following:	

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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- 4. The undersigned certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the undersigned understands and agrees that the provisions of 31 U.S.C. §3801, et seq., apply to this certification and disclosure, if any.

Date: December 17, 2012
Firm/Entity: Earth Exploration, Inc.
Signature:
Name: Richard D. Olson
Title: Vice President

Developer: WVB East End Partners, LLC

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.]

The undersigned Developer	, Equity Member	, Major Participant, c	)I
proposed Contractor X	certifies on behalf of itself the	he following:	

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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- 4. The undersigned certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the undersigned understands and agrees that the provisions of 31 U.S.C. §3801, et seq., apply to this certification and disclosure, if any.

Date: December 19, 2012
Firm/Entity: RWDI
Signature: Vully
Name: Deale lely
Title: Principal / General Manager
Developer: WVB East End Partners, LLC

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.]

The unde	rsigned De <sup>,</sup>	veloper	, Equi	ity Mem	ber	, Major P	'articipant	 Of
proposed	Contractor	<u>X</u>	certifies on	behalf	of itself	the followi	ng:	

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
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- 4. The undersigned certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the undersigned understands and agrees that the provisions of 31 U.S.C. §3801, et seg., apply to this certification and disclosure, if any.

Date:	December	17, 2012

Firm/Entity: Stantec Consulting Services Inc.

Signature: Hati Harri

Name: Stan A. Harris

Title: Principal

Developer: WVB East End Partners, LLC

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.]

The undersigned Develope	r, Equity Member _	, Major Participant	, or
proposed Contractor X	certifies on behalf of its	elf the following:	

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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Date: 2012 December 14

Firm/Entity: Buckland & Taylor Ltd.

Signature:

Name: Steve Hunt, M.Eng., P.Eng

Title: President & CEO

Developer:: WVB East End Partners, LLC

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.]

The undersigned Develope	r, Equity Member,	Major Participant, or
proposed Contractor X	certifies on behalf of itself th	ie following:

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
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Date: 12/17/2012

Firm/Entity: MacDonald Architects

Gorald Frankovall.

Signature

Name: Donald MacDonald

Title: Principal

Developer: WVB East End Partners, LLC

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.]

The undersigned Dev	/eloper	, Equity Member	, Major Participant	, or
proposed Contractor	<u>X</u>	certifies on behalf of its	self the following:	

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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BOOK BOOK 10, BU 1.	Date:	December	15.	201	2
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Firm/Entity: CARMAN

Signature:

Name: John L. Garman

Title: President/Sr. Principal

Developer: WVB East End Partners, LLC

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.]

### USE OF CONTRACT FUNDS FOR LOBBYING CERTIFICATION

The undersign	ied Proposer 🏒	_ Equity Member _	Major Participant _	proposed
		If of itself the follow	ving:	

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject

Date: Citolica 19ta, 2012
Firm/Entity: VIVB Engl Engl Red Red
Signature: <u>// // }</u>
Title: Ry I town town / Referred Copyers to town
Proposer: 1/1/28 East East Partners

[Copy this form and modify as needed for execution by Proposer, Equity Members, Major Participants, and all proposed Contractors]

to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or

failure.]

## USE OF CONTRACT FUNDS FOR LOBBYING CERTIFICATION

The undersigned Proposer	_ Equity Member _	<u>X</u>	Major Participant	proposed
Contractorcertifies on beha	If of itself the follow	wing:		

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject.

Date: 10/17/12
Firm/Entity: <u>Walsh Investors 41.C</u>
Signature:
Title: <u>Manager</u>
Proposer: WVB East End Partners

to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or

failure.]

## USE OF CONTRACT FUNDS FOR LOBBYING CERTIFICATION

The undersigned Proposer	Equity Member	3000	Major Participant	proposed
Contractorcertifies on bel	nalf of itself the follo	wing:	;	

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or altempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.]

Date: <u>26 Oxfoler 20-72</u>

Firm/Entity: 1/1/01 CONTOSCIONO SAS

Signature: Zan Long - Kung Lo L

Title: PROJECT DIRECTOR NORTH ANGRICA

Proposer: WV R FAST GUD PARTIERS

#### USE OF CONTRACT FUNDS FOR LOBBYING CERTIFICATION

The undersigned Equity Member certifies on behalf of itself the following:

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
  - b. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions, and shall include a copy of said form in its proposal or bid, or submit it with the executed Agreement or Subcontract.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- The undersigned shall require that the language of this certification be included in all lower fier subcontracts which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.
- 4. The undersigned certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the undersigned understands and agrees that the provisions of 31 U.S.C. §3801, et seq., apply to this certification and disclosure, if any.

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject

to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.]

Date: 437777472 37777777

Nick Dawson

Dirk Söhngen

Managing Director

Managing Director

Riffinger Berger Project-investments International Holding GmbH

Equity Member of WVB East End Partners

### USE OF CONTRACT FUNDS FOR LOSSYING CERTIFICATION

The undersigne	ed Proposer	Equity Member	Major	Participant	X	proposed
Contractor	certifies on behal	f of itself the followi	ng:			

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
  - b. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions, and shall include a copy of said form in its proposal or bid, or submit it with the executed Agreement or Subcontract.
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- The undersigned shall require that the language of this certification be included in all lower tier subcontracts which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.
- 4. The undersigned certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the undersigned understands and agrees that the provisions of 31 U.S.C. §3801, et seq., apply to this certification and disclosure, if any.

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or falls to file or amend a required certification or disclosure form shall be subject.

Date:		
Firm/Entity: <u>V</u>	Walsh Construction-Vinci CGP Construction Joint Venture	
Signature:		
Title:	6a. V. P.	
Proposer: W	WB East End Partners	

to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or

failure.]

## USE OF CONTRACT FUNDS FOR LOBBYING CERTIFICATION

The undersign	ed Proposer	Equity Member	Major Participant	X proposed
Contractor	certifies on behalf	of itself the following:		

- The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
  - b. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions, and shall include a copy of said form in its proposal or bid, or submit it with the executed Agreement or Subcontract.
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- 4. The undersigned certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the undersigned understands and agrees that the provisions of 31 U.S.C. §3801, et seq., apply to this certification and disclosure, if any.

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or falls to file or amend a required certification or disclosure form shall be subject

failure.]
Date: 10/17/12
Firm/Entity: Walsh Construction Company
Signature: Callul, L.
Title: President

to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or

Proposer: WVB East End Partners

## USE OF CONTRACT FUNDS FOR LOBBYING CERTIFICATION

The undersign	ed Proposer	Equity Member	Major Participant	X	proposed
Contractor	certifies on behalf	of itself the following:			

- The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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- 4. The undersigned certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the undersigned understands and agrees that the provisions of 31 U.S.C. §3801, et seq., apply to this certification and disclosure, if any.

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject

Date: Ochober 19th 2012
Firm/Entity: Vinci Construction Grands Projets
Signature: 77, 1
THE Suffainability Thrector & Bid Manager
Proposer: WVB East End Partners

[Copy this form and modify as needed for execution by Proposer, Equity Members, Major Participants, and all proposed Contractors]

to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or

failure.]

### USE OF CONTRACT FUNDS FOR LOBBYING CERTIFICATION

The undersign	ed Proposer	Equity Member	Major Partici	pant X	proposed
Contractor	certifies on beha	if of itself the follow	ring:		

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
  - b. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-L.L., "Disclosure Form to Report Lobbying," in accordance with its instructions, and shall include a copy of said form in its proposal or bid, or submit it with the executed Agreement or Subcontract.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- The undersigned shall require that the language of this certification be included in all lower tier subcontracts which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.
- 4. The undersigned certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the undersigned understands and agrees that the provisions of 31 U.S.C. §3801, et seq., apply to this certification and disclosure, if any.

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject.

to a ci failure	vil penalty .]	of no	t less t	than t	\$10,000	and	not m	ore	than	\$100	,000,	for	each	expe	nditun	ë or
Date:	October	184	. 201	2												

Proposer: WVB East End Partners

[Copy this form and modify as needed for execution by Proposer, Equity Members, Major Participants, and all proposed Contractors]

#### USE OF CONTRACT FUNDS FOR LOSSYING CERTIFICATION

The	undersigned Proposer "	Equity Member	, Major Participant	proposed
Com	tractor X_certifies on be	half of itself the following:		

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
  - b. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions, and shall include a copy of said form in its proposal or bid, or submit it with the executed Agreement or Subcontract.
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(Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject

to a civil	penaity	of not k	ess than	\$10,000	andi	not more	than t	\$100,000	tor each	expendi	me or
failure.)											
<i></i>											

Date:	<u> </u>	
Firm/Enti	: International Bridge Technologies	
Signature		
Title:P	psident	
<sup>3</sup> roposer	WV8 East End Padners	

(Copy this form and modify as needed for execution by Proposer, Equity Members, Major Participants, and all proposed Contractors)

#### USE OF CONTRACT FUNDS FOR LOSSYING CERTIFICATION

The undersigned Proposer	Equity Member	, Major Participani	l proposed
Contractor 🕺 certifiés on t			V

- The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal grant, the making of any federal load, the entering into of any cooperative agreement, and the extension, continuation, renewel, amendment, or modification of any federal contract, grant, toan, or cooperative agreement.
  - b. If any funds other than lederal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any federal contract, grant, ioan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions, and shall include a copy of said form in its proposal or bid, or submit it with the executed Atmeement or Subcontract,
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to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or follows.)
Oate: 4/1/22 .
Francisco de <u>la proporte Mongare de la so</u> calata o
Signaturo. Jan Han Hang of
Time: 1622/07/27/4
Proposer NAC Fay C.A. D. M.

(Copy this form and medify as needed for execution by Proposer, Equity Members, Major Participants, and all proposed Contractors)

#### USE OF CONTRACT FUNDS FOR LOSSYING CERTIFICATION

The unders	iigned Propo	serE	quity Mem	berl	ผู้สอบ	Participant	proposed
Contractor	X_certifies	on behalf o	f itself the	following:			

- The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal toan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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to a civil	penaity	of not	less	than \$	10,000	and	not	more	than	\$100	,000	for	each	expe	ndäure	e Of
faiture.)																

Date.	13.2-32
Firm/Entity:	Third Rock Consultants LLC
Signature:	Male Davis
Tille:	President
Proposer: <u>V</u>	VVB East End Padners

[Copy this form and modify as needed for execution by Proposer, Equity Members, Major Participants, and all proposed Contractors]

### USE OF CONTRACT FUNDS FOR LOBBYING CERTIFICATION

The undersigned Proposer	Equity Member	Major Participant	proposed
Contractor <u>X</u> certifies on behalf	of itself the following:	3	

- The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject.

Date: November 1, 2012
Firm/Entity: James H Orew Corporation
Signature: Sec. La May
Title: Gene Lindley, C.O.O.
Proposer Wells Cas Cas Berekli
[Copy this form and modify as needed for execution by Proposer, Equity Members, Major Participants, and all proposed Contractors]

to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or

failure.

#### USE OF CONTRACT FUNDS FOR LOBBYING CERTIFICATION

The undersigned proposed Contractor \_\_\_\_certifies on behalf of itself the following:

- The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employed of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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to a civil pensity of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.)

Date: 11/1/2012

Firm/Entity: Advitam, Inc.

Signature:

Title: COO

Proposer, WVB East End Partners

(Copy this form and modify as needed for execution by Proposer, Equity Members, Major Participants, and all proposed Contracters)

# USE OF CONTRACT FUNDS FOR LOBBYING CERTIFICATION

		Equity Member		n Otaposka
Contractor X	centifies on be	half of itself the follows	ng:	

- The undersigned certifies, to the best of its Knowledge and bekef, that
  - a No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension continuation renewal, amendment or modification of any federal contract, grant, loan, or cooperative agreement.
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to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure of failure.)

Date: <u>11-2-12</u>	
Face/Entay <u>G.Le</u>	e Construcion Services, Inc.
Signature:	
Title Preside	
	<b>::e:</b>
ing spay on their	Para End Parkers

(Copy this form and modify as needed for execution by Proposer, Equity Members, Major Participants, and all proposed Coninsctors)

#### USE OF CONTRACT FUNDS FOR LOBBYING CERTIFICATION

The undersigned Proposer	Equity Member		proposed
Contractor X certifies on be	half of itself the followi	ng:	

- The undersioned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or failure.)

Date: <u>11/1/</u>	112
Firm/Entity	: Messier & Associates Inc.
	Allen
Title:	<u> SEO</u>
Proposer:	Name Carlo Sad Bases

(Copy this form and modify as needed for execution by Proposer, Equity Members, Major Participants, and all proposed Contractors)

# USE OF CONTRACT FUNDS FOR LOBBYING CERTIFICATION

The undersigned Proposer	Equity Member	Major Participant	proposed
Contractor <u>x</u> certifies on behalf o	fitself the following:		

- The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
  - b. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions, and shall include a copy of said form in its proposal or bid, or submit it with the executed Agreement or Subcontract.
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- The undersigned shall require that the language of this certification be included in all lower tier subcontracts which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.
- 4. The undersigned cortifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the undersigned understands and agrees that the provisions of 31 U.S.C. §3801, at seq., apply to this certification and disclosure, if any

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or falls to file or amend a required certification or disclosure form shall be subject

to a civil	-penalty (	of not less	than \$10,0	00 and no	t more tha	n \$100,000 for	lesch expenditure or
failure.]							
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#### USE OF CONTRACT FUNDS FOR LOSBYING CERTIFICATION

The unders	signed Propost	r – Equity Men	iber Majoi	: Participant	_ proposed
		behalf of itself the	***************************************		

- The undersigned certifies, to the best of its knowledge and belief, that:
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[Copy this form and modify as needed for execution by Proposer, Equity Members, Major Participants, and all proposed Contractors]

#### USE OF CONTRACT FUNDS FOR LOBBYING CERTIFICATION

The undersigned Prop	posertquity Me	imber Majoi	(Participant	proposed
Contractor X certifie	is on behalf of itself th	re following:		

- The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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Date:	<u> </u>
FirmEntity	
Signature:	<u></u>
Title: 2	<u>ing jadi. Ansangsadi Alebaga</u>
Proposer,	<u> </u>

to a civil penalty of not less than \$10,000 and not more than \$100,000 for each expenditure or

[Copy this form and modify as needed for execution by Proposer, Equity Members, Major Participants, and all proposed Contractors]

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#### USE OF CONTRACT FUNDS FOR LOSBYING CERTIFICATION

The undersigned Proposer	Equity Member	Major Participant	proposed
Contractor X_certifies on behalf	of itself the following.	• :	

- The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension continuation, renewal, emendment, or modification of any federal contract, grant, loan, or cooperative agreement.
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Date	November 2, 2012
	ntity: Stantec Consulting Services Inc.
Signati	88. <u>ASSAURA</u>
	Principal
Propos	er: WV8 East End Padners

(Copy this form and modify as needed for execution by Proposer, Equity Members, Mejor Participants, and all proposed Contractors)

#### USE OF CONTRACT FUNDS FOR LOBBYING CERTIFICATION

The undersigned Proposer	Equity Member	Major Participant	proposed
Contractor 🔏 certifies on behalf	of itself the following:		

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Date: 2012 November 2	
Firm/Entity: <u>Buckland &amp; Taylor Ltd.</u>	
Signature:	
Title: <u>CEO/President</u>	
Proposer: WVB East End Partners	

[Copy this form and modify as needed for execution by Proposer, Equity Members, Major Participants, and all proposed Contractors]

#### USE OF CONTRACT FUNDS FOR LOBBYING CERTIFICATION

The unders	dgned Propor	ser Equ	uity Membe	и Мај	or Participant	proposed
Contractor	$_{\sim}$ certifies $\iota$	m behalf of i	tself the fo	llowing:		

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
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Date: November 1, 2012

Firm/Entity: MacDonald Architects

Signature:

Title: Principal

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failure.							·

Oate: November 02, 2012

Firm/Entity: CARMAN

Signature: 202

Title: President

Proposer: 202

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[Copy this form and modify as needed for execution by Proposer, Equity Members, Major Participants, and all proposed Contractors]

# USE OF CONTRACT FUNDS FOR LOBBYING DERTHICATION

The undersigned Proposer :	Equity Nember	Major Porticipant	wepased
Contractor, k <sub>a</sub> certifies on te	shalf of Reelf line following	£	

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  - a. No federal approprimers funds have been paid or will be pold, by or on behalf of the undersigned, to any person for influencing or attempting to influence on officer or employee of any federal agency, a Member of Congress an officer or employee of Congress, or an employee of Member of Congress in connection with the awarding of any secent contract, the making of any federal grant, the making of any federal grant, the making of any federal lean, the obtained into at any cooperative agreement, and the extensions continuation, renewel, amendment, or modification of any federal contract, grant, loss, or cooperative egreement.
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Signature Code A, compt

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Propissor on the Continuities - Consider

(Copy this form and modify as needed for execution by Proposer, Equity Mondrers, Major Participants, and all proposed Contractors)

## USE OF CONTRACT FUNDS FOR LOSSYING CERTIFICATION

The undersigned Proposer	Equity Member	Major Participant	proposed
Contractor x certifies on behalf	of itself the following:		

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Date: 11	/2/32
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Signature/	L. Steining Stein
Title: pres	
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# USE OF CONTRACT FUNDS FOR LOBBYING CERTIFICATION

The und	ខរទៀព	ed Propo	68633	Equity	Member		Major	Participant	roposed
Contrac	lor <u>X</u>	_certifies	on behalf	of itse	If the foll	owing:			

- 1. The undersigned certifies, to the best of its knowledge and belief, that:
  - a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension continuation, renewal, amendment, or modification of any federal contract, grant, toan, or cooperative agreement.
  - b. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions, and shall include a copy of said form in its proposal or bid, or submit it with the executed Agreement or Subcontract.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- The undersigned shall require that the language of this certification be included in all lower tier subcontracts which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.
- 4. The undersigned certifies of affirms the truthfutness and accuracy of each statement of its certification and disclosure. If any. In addition, the undersigned understands and agrees that the provisions of 31 U.S.C. §3801, et seq., apply to this certification and disclosure, if any.

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject.

to a dividipensity.	of not less than	\$10,000 and r	not more than \$10	J0,000 for each	expenditure or
failure.)					

Date: <u>Nov</u>	smbor 2, 2012
Firm/Entity	: Bizzagk Construction, LLC
Signature:	Las 4490,
	Vice President (
Proposer	V18 For Tall Balwas

¡Copy this form and modify as needed for execution by Proposer, Earlity Members, Major Participants, and all proposed Contractors]

# EXHIBIT 2-Q

# DEBARMENT AND SUSPENSION CERTIFICATION

[attached]

#### **DEBARMENT AND SUSPENSION CERTIFICATION**

The undersigned Developer certifies on behalf of itself and all Equity Members, Major Participants and Contractors the following:

The undersigned certifies to the best of its knowledge and belief, that it and its principals:

- Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;
- b. Have not within a 3-year period preceding the date hereof been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and
- d. Have not within a 3-year period preceding the date hereof had one or more public transactions (federal, state or local) terminated for cause or default.

Where Developer is unable to certify to any of the statements in this certification, it shall attach a certification hereto stating that it is unable to provide the certification and explaining the reasons for such inability.

Date: December 27, 2012

Developer: WVB East End Partners KDC

Signature:

Title: Project Executive

Debarment and Suspension Certificate

#### EXHIBIT 2-R

#### FORM OF DRUG-FREE WORKPLACE CERTIFICATION

Developer hereby covenants and agrees to make a good faith effort to provide and maintain a drug-free workplace. Developer will give written notice to IFA within ten (10) days after receiving actual notice that Developer or an employee of Developer has been convicted of a criminal drug violation occurring in Developer's workplace. False certification or violation of this certification may result in sanctions including, but not limited to, suspension of agreed upon payments, termination of the Agreement and/or debarment of contracting opportunities with the State of Indiana for up to three (3) years.

In addition to the provisions of the above paragraphs, if the total agreed upon amount set forth in the Agreement is in excess of \$25,000.00. Developer hereby further agrees that the Agreement is expressly subject to the terms, conditions, and representations of the following certification:

This certification is required by Executive Order No. 90-5, April 12, 1990, issued by the Governor of Indiana. No award of a contract shall be made, and no contract, purchase order or agreement, the total amount of which exceeds \$25,000.00, shall be valid, unless and until this certification has been fully executed by Developer and made a part of the contract or agreement as part of the contract documents.

Developer certifies and agrees that it will provide a drug-free workplace by:

- A. Publishing and providing to all of its employees a statement notifying them that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in Developer's workplace, and specifying the actions that will be taken against employees for violations of such prohibition;
- B. Establishing a drug-free awareness program to inform its employees of (1) the dangers of drug abuse in the workplace; (2) Developer's policy of maintaining a drug-free workplace; (3) any available drug counseling, rehabilitation, and employee assistance programs; and (4) the penalties that may be imposed upon an employee for drug abuse violations occurring in the workplace;
- C. Notifying all employees in the statement required by subparagraph (A) above that as a condition of continued employment, the employee will (1) abide by the terms of the statement; and (2) notify Developer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction;
- D. Notifying in writing to IFA and the Indiana Department of Administration within ten (10) days after receiving notice from an employee under subparagraph (C)(2) above, or otherwise receiving actual notice of such conviction;
- E. Within thirty (30) days after receiving notice under subdivision (C)(2) above of a conviction, imposing the following sanctions or remedial measures on any employee who is convicted of drug abuse violations occurring in the workplace: (1) taking appropriate personnel action against the employee, up to and including termination; or

- (2) requiring such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state or local health, law enforcement, or other appropriate agency; and
- F. Making a good faith effort to maintain a drug-free workplace through the implementation of subparagraphs (A) through (E) above.

The undersigned certification on be	of perjury that he or she is authorized to execute this
dated [	 WVB EAST END PARTNERS, LLC
	By: Name: Title:

#### EXHIBIT 2-S

# FORM OF FINANCIAL CLOSE CERTIFICATE

#### WVB East End Partners, LLC

# [DATE]

Pursuant to Section 18.5 of the Public Private Agreement (the "Agreement"), by and between the Indiana Finance Authority ("IFA") and WVB East End Partners, LLC ("Developer"), Developer hereby represents, certifies and warrants to IFA as at the date of Financial Close (except where a specific date is referred to below, in which case the truth and accuracy of the representation, certification and warranty shall be as at such specific date) as follows:

- 1. The Financial Model Formulas (a) were prepared by or on behalf of Developer in good faith, (b) are the same financial formulas that Developer utilized and is utilizing in the Financial Model in making disclosures to potential equity investors and Lenders under the Initial Funding Agreements, and (c) as of the effective date of the Initial Funding Agreements are mathematically correct and suitable for making reasonable projections.
- 2. The Financial Model (a) was prepared by or on behalf of Developer in good faith, (b) was audited and verified by an independent recognized model auditor immediately prior to the Effective Date of the Agreement and such audit was updated within 48 hours after the Effective Date, (c) fully discloses all cost, traffic, revenue and other financial assumptions and projections that Developer has used and is using in making disclosures to equity investors and Lenders under the Initial Funding Agreements and (d) as of the effective date of the Initial Funding Agreements represents the projections that Developer believes in good faith are the most realistic and reasonable for the East End Crossing; provided, however, that such projections (i) are based upon a number of estimates and assumptions, (ii) are subject to significant business, economic and competitive uncertainties and contingencies and (iii) accordingly are not a representation or warranty that any of the assumptions are correct, that such projections will be achieved or that the forward-looking statements expressed in such projections will correspond to actual results.
- 3. Neither Developer nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from entering into agreements such as the Agreement by any federal agency or by any department, agency or political subdivision of the State. For purposes of this Certificate, the term "principal" means an officer, director, owner, partner, Key Personnel, employee, or other person with primary management or supervisory responsibilities, or a person who has a critical influence on or substantive control over the operations of Developer.
- 4. Developer has reviewed all applicable Laws relating to Taxes, and has taken into account all requirements imposed by such Laws in preparing the Financial Model.
- 5. As of the date of this Certificate, based upon its Reasonable Investigation, Developer has evaluated the constraints affecting design and construction of the East End Crossing, including the Project Right of Way limits, the terms and conditions of the NEPA Approval, IFA-Provided Approvals obtained prior to the Setting Date, the surface and

subsurface conditions discoverable through such Reasonable Investigation, and applicable Laws, and Developer has reasonable grounds for believing and does believe that the East End Crossing can be designed and built within such constraints.

- 6. Developer, in accordance with Good Industry Practice, conducted a Reasonable Investigation, and as a result of such Reasonable Investigation, Developer is familiar with and accepts the physical requirements of the Work, subject to IFA's obligations regarding Hazardous Materials under <u>Section 5.9</u> of the Agreement and Developer's rights to seek relief under <u>Article 15</u> of the Agreement.
- 7. Developer is a limited liability company duly organized and validly existing under the laws of Delaware, has the requisite power and all required licenses to carry on its present and proposed activities, and has full power, right and authority to execute and deliver the Initial Funding Agreements and to perform each and all of the obligations of Developer provided for therein. Developer is duly qualified to do business, and is in good standing, in the State and in the Commonwealth of Kentucky. Developer affirms that, if it is an entity described in IC Title 23, it is properly registered and owes no outstanding reports with the Indiana Secretary of State.
- 8. The execution, delivery and performance of the Initial Funding Agreements have been duly authorized by all necessary corporate action of Developer; each person executing the Initial Funding Agreements on behalf of Developer has been duly authorized to execute and deliver each such document on behalf of Developer; and the Initial Funding Agreements have been duly executed and delivered by Developer.
- 9. Neither the execution and delivery by Developer of the Initial Funding Agreements, nor the consummation of the transactions contemplated thereby, is in conflict with or has resulted or will result in a default under or a violation of the governing instruments of Developer or any agreement, judgment or decree to which Developer is a party or is bound, including the Agreement.
- 10. The execution and delivery by Developer of the Initial Funding Agreements, and the performance by Developer of its obligations thereunder, will not conflict with any Laws applicable to Developer that are valid and in effect on the date of execution and delivery. Developer is not in breach of any applicable Law that would have a material adverse effect on the Work or the performance of any of its obligations under the Initial Funding Agreements.
- 11. Each of the Initial Funding Agreements constitutes the legal, valid and binding obligation of Developer, enforceable against Developer and, if applicable, each Equity Member of Developer, in accordance with its terms, subject only to applicable bankruptcy, insolvency and similar laws affecting the enforceability of the rights of creditors generally and the general principles of equity.
- 12. There is no action, suit, proceeding, investigation or litigation pending and served on Developer which challenges Developer's authority to execute, deliver or perform, or the validity or enforceability of, the Initial Funding Agreements, the PPA Documents and the Principal Project Documents to which Developer is a party, or which challenges the authority of the Developer official executing the Initial Funding Agreements, the PPA Documents or such Principal Project Documents; and Developer has disclosed to IFA prior to the effective date of

the Initial Funding Agreements any pending and un-served or threatened action, suit, proceeding, investigation or litigation with respect to such matters of which Developer is aware. Developer has no current, pending or outstanding criminal, civil, or enforcement actions initiated by IFA, the State or the Commonwealth of Kentucky, and Developer agrees that it will immediately notify IFA of any such actions.

- 13. Between the Effective Date and the effective date of the Initial Funding Agreements, Developer has not obtained knowledge of any additional organizational conflict of interest not disclosed as of the Effective Date of the Agreement, and there have been no organizational changes to Developer or its Contractors identified in its Proposal, which have not been approved in writing by IFA. For this purpose, organizational conflict of interest has the meaning set forth in the Request for Proposals.
- 14. Neither Developer nor its principal(s) is presently in arrears in payment of Taxes, permit fees or other statutory, regulatory or judicially required payments to IFA, the State or the Commonwealth of Kentucky.
- 15. The individual signing the Agreement on behalf of Developer, subject to the penalties for perjury, that he/she is the properly authorized representative, agent, member or officer of Developer, that he/she has not, nor has any other member, employee, representative, agent or officer of Developer, directly or indirectly, to the best of the undersigned's knowledge, entered into or offered to enter into any combination, collusion or agreement to receive or pay, and that he/she has not received or paid, any sum of money or other consideration for the execution of the Agreement other than that which appears upon the face of the Agreement.

Capitalized terms used, but not defined, have the meanings ascribed in the Agreement.

IN WITNESS	WHEREOF, the undersigned, the duly elected and qualified [title] of WVB East
	LLC], a Delaware limited liability company, has been authorized by
all necessary	organizational action to make this certification on behalf of Developer (and without
personal liabil	ity) and further certifies that [he]/[she] has caused this certificate to be executed
as of the date	first written above.
Signature:	
a. i	
Name:	
Trible	
Title:	

State of Indiana County of	\$ \$
	wledged before me on this [] day of [], [][title] of WVB East End Partners, LLC, a on behalf of said company.
[Notary Seal]	Notary Public in and for the State of Indiana
	Printed Name of Notary Public
My Commission Expires:	

#### EXHIBIT 2-T

### FORM OF IFA BRING-DOWN CERTIFICATE

	letterhead	of IFA	outside	couns	e/]
(C	ATE]				

Pursuant to <u>Section 18.5</u> of the Public Private Agreement (the "Agreement"), by and between the Indiana Finance Authority ("IFA") and WVB East End Partners, LLC ("Developer"), IFA hereby represents, certifies and warrants to Developer as at the Effective Date of the Agreement as follows:

- 1. IFA has full power, right and authority to execute, deliver and perform the PPA Documents, the Milestone Agreement, the Use Agreement and the Principal Project Documents to which IFA is (or will be) a party and to perform each and all of the obligations of IFA provided for herein and therein.
- 2. Each person executing on behalf of IFA the PPA Documents, the Milestone Agreement, the Use Agreement and the Principal Project Documents to which IFA is (or will be) a party has been (or at the time of execution will be) duly authorized to execute and deliver each such document on behalf of IFA; and the PPA Documents, the Milestone Agreement, the Use Agreement and such Principal Project Documents have been (or will be) duly executed and delivered by IFA.
- 3. The PPA Documents, the Milestone Agreement, the Use Agreement and the Principal Project Documents to which IFA is (or will be) a party have each been duly authorized by IFA, and each constitutes (or at the time of execution and delivery will constitute) a legal, valid and binding obligation of IFA enforceable against IFA in accordance with its terms.
- 4. There is no action, suit, proceeding, investigation or litigation pending and served on IFA which challenges IFA's authority to execute, deliver or perform, or the validity or enforceability of, the PPA Documents, the Milestone Agreement, the Use Agreement and the Principal Project Documents to which IFA is a party or which challenges the authority of the IFA official executing the PPA Documents, the Milestone Agreement, the Use Agreement and such Principal Project Documents; and IFA has disclosed to Developer prior to the Effective Date any pending and un-served or threatened action, suit, proceeding, investigation or litigation with respect to such matters of which IFA is aware.
- 5. Neither the execution and delivery by IFA of the PPA Documents, the Milestone Agreement or the Use Agreement, nor the consummation of the transactions contemplated thereby, is (or at the time of execution will be) in conflict with or has resulted or will result in a default under or a violation of the enabling legislation of IFA or any agreement, judgment or decree to which IFA is a party or is bound.
- 6. The execution and delivery by IFA of the PPA Documents, the Milestone Agreement or the Use Agreement and the performance by IFA of its obligations thereunder, will not conflict with any Laws applicable to IFA that are valid and in effect on the date of execution and delivery. IFA is not in breach of any applicable Law that would have a material adverse

effect on the performance of any of its obligations under the PPA Documents, the Milestone Agreement or the Use Agreement.

7. No consent of any party and no Governmental Approval is required to be made in connection with the execution, delivery and performance of the Agreement, which as not already been obtained.

Capitalized terms used, but not defined, have the meanings ascribed in the Agreement.

IN WITNESS WHEREOF, the undersigned, the duly elected and qualified [title] of the Indiana Finance Authority, a body corporate and politic, not a state agency but an instrumentality exercising essential public functions, of the State of Indiana, has been authorized by all necessary organizational action to make this certification on behalf of IFA (and without personal liability) and further certifies that [he]/[she] has caused this certificate to be executed as of the date first written above.

Signature:	
Name:	
Title:	

State of Indiana County of	§ §
	before me on this [] day of []][title] of the Indiana Finance Authority, on its
[Notary Seal]	Notary Public in and for the State of Indiana
	Printed Name of Notary Public
My Commission Expires:	1

[reserved]

# **MILESTONE PAYMENT AMOUNTS**

Milestone	Description	Amount (in millions)
1	Complete Main Span Pier Foundations	\$25
2	Complete Tunnel Excavation and Initial Liner	\$80
3	Complete Main Span Towers	\$45
4	Complete Indiana East End Roadway from Old Salem Road Northwest to and Including the SR 62/Port Road/SR 265 Interchange	\$45
5	Complete KY 841 construction between I-71 and US 42	\$50
6	Complete Final Tunnel Liner	\$26
7	Complete Main Span Superstructure Erection	\$26
8	Substantial Completion	<b>\$</b> 95
Total Milesto	ne Payments	\$392

#### HAZARDOUS MATERIALS RISK ALLOCATION TERMS

All risks associated with the discovery of Hazardous Materials in, on, under or within (i) from the Effective Date until the Substantial Completion Date, the Project Right of Way and (ii) during the Operating Period, the O&M Limits, in each case including costs and expenses and schedule delays arising out of any Hazardous Materials in, on or under (i) from the Effective Date until the Substantial Completion, the Project Right of Way and (ii) during the Operating Period, the O&M Limits, in each case will be borne by Developer, except as follows.

- 1. If there occurs any Relief Event under <u>clause (m)</u> or <u>(n)</u> of the definition of Relief Event, and if Developer timely satisfies the terms and conditions for asserting a Relief Event set forth in <u>Section 15.1</u> of the Agreement, then IFA will pay the applicable Extra Work Costs and Delay Costs directly attributable to the handling, containment, transport, removal, remediation and disposal of such Hazardous Materials, subject to the following:
- (a) Such Extra Work Costs and Délay Costs shall be limited as set forth in Section 3 below;
- (b) If the Hazardous Materials are contained in soils or other solid materials or objects that may be returned to trenches or other areas of excavation within or adjacent to (i) from the Effective Date until the Substantial Completion, the Project Right of Way and (ii) during the Operating Period, the O&M Limits, in each case pursuant to regulations, policies or approvals of applicable Governmental Entities, and if the excavation of such contaminated soils or other solid materials or objects is undertaken for any purpose or reason other than the fact of contamination, then the Extra Work Costs shall be limited to the reasonable out-of-pocket costs of handling such contaminated soils, materials and objects in excess of the out-of-pocket costs Developer would incur to handle the same if they were not contaminated:
- (c) If the Hazardous Materials are contained in soils or other solid materials or objects that are removed from the Site for any purpose or reason other than the fact of contamination, then the Extra Work Costs for which IFA is liable shall be limited to the incremental increase in out-of-pocket cost to excavate, handle, haul and dispose of the soils or other solid materials or objects over the out-of-pocket cost to excavate, handle, haul and dispose of them if they did not contain Hazardous Materials;
- (d) If avoidance or remediation of such Hazardous Materials is capable of being accomplished under applicable Laws and Governmental Approvals through measures less costly than excavation, removal and off-site disposal of contaminated soil and groundwater, or less costly than return to trenches and other areas of excavation, which measures may include (i) design modifications and construction techniques to avoid such Hazardous Materials or reduce the quantities to be excavated, removed and disposed of off-site, and (ii) on-site containment and institutional controls, then IFA shall only be liable for the least costly alternative, provided, that if Developer believes that excavation, removal and off-site disposal is overall the best method for handling such Hazardous Materials, considering all factors, including cost and schedule impacts to both IFA and Developer, then Developer shall first obtain IFA's concurrence in such judgment, which concurrence shall not be unreasonably withheld, conditioned or delayed, and Developer shall respond to all reasonable requests by IFA for

supporting information in respect of such judgment, whereupon Developer shall be entitled only to the actual, documented and reasonable out-of-pocket cost to undertake such excavation. removal and off-site disposal; and

- The Extra Work Costs and Delay Costs available under this Section 1 are subject to the Claim Deductible as provided in Section 15.6.2 of the Agreement and shall be payable first out of the Relief Events Allowance as provided in Section 15.6 of the Agreement until exhausted, and second by IFA.
- IFA Release(s) of Hazardous Materials, other than Known or Suspected Hazardous Materials, is a Relief Event (under clause (m) of the definition of Relief Event). subject to the applicable limitations set forth in Section 3 below.
- None of the following liabilities, costs, expenses and Losses shall be chargeable against or reimbursable by IFA:
- (a) Liabilities, costs, expenses and Losses to the extent attributable to Developer Releases of Hazardous Materials:
- Extra Work Costs and Delay Costs arising out of Releases of Hazardous Materials from vehicles operating within (i) from the Effective Date until the Substantial Completion Date, the Project Right of Way, and (ii) during the Operating Period, the O&M Limits, in each case, unless operated by IFA;
- Liabilities, costs, expenses and Losses that could be avoided by the exercise of Good Industry Practice to mitigate and reduce cost, including exercise of Developer's duties to avoid and mitigate set forth in Section 5.9.2 of the Agreement;
- Costs and expenses to investigate and characterize Hazardous Materials (including Phase 1 ESAs and preliminary site investigations (i.e. phase 2 investigations)) of unexpected and minimal quantities, except with respect to Hazardous Materials of an unexpected and extraordinary quantity or toxicity, whereupon IFA and Developer shall negotiate in good faith an amount for such costs and expenses for which IFA shall be liable to pay:
  - (e) Developer Releases of Hazardous Materials;
- Liabilities, costs, expenses and Losses incurred if IFA is not afforded the opportunity to inspect sites containing Hazardous Materials or IFA Releases of Hazardous Materials before Developer takes any action which would inhibit IFA's ability to ascertain, based on a site inspection, the nature and extent of the materials, except for Developer's Emergency actions necessary to stabilize and contain a sudden release or otherwise required by Law to immediately address the Emergency:
- Liabilities, costs, expenses and Losses with respect to Hazardous Materials in, on or under locations Developer is required to avoid pursuant to the Technical Provisions; or
- Liabilities, costs, expenses and Losses covered by insurance available to Developer, or deemed to be self-insured by Developer under Section 17.1.4.4 of the Agreement.

- Extra Work Costs for off-site disposal of soils contaminated with Hazardous Materials for which IFA is liable under this Exhibit 5 shall be determined by applying the same unit price (per ton or cubic yard) that applies to Developer under the Design-Build Contract with respect to off-site disposal for which Developer is not compensated by IFA. If no such unit price is stated in the Design-Build Contract, then the unit price shall not exceed the unit price IFA could obtain through competitive low bid from a qualified contractor for such work.
- As between IFA and Developer, IFA will retain generator and arranger status for Hazardous Materials to the extent set forth in Sections 5.9.6 and 5.9.7 of the Agreement.
- Developer may be entitled to schedule, performance and other relief due to a Relief Event under clause (m) or (n) of the definition of Relief Event to the extent provided in Sections 15.11 and 15.12 of the Agreement; provided that no time extension shall be allowed with respect to immaterial quantities of Hazardous Materials in any particular location.

# HANDBACK REQUIREMENTS RESERVE ELEMENTS AND RESERVE FUNDING MECHANISM

- Developer shall make deposits to the Handback Requirements Reserve Account by the last day of each Quarter, commencing with the first Quarter of the fifth full calendar year before the end of the Term, and continuing thereafter.
- 2. Developer shall make quarterly deposits into the Handback Requirements Reserve Account so that by the *beginning* of each of the last four years during the Term the Handback Requirements Reserve will contain an amount equal to:
  - (a) The summation across all Elements that have a number of years stated in the "Useful Life" column in <u>Table 23-1</u> (Residual Life Requirements at Handback) of the Technical Provisions of the following factors, as set forth in the most recent Rehabilitation Work Schedule (as it may be revised pursuant to the Handback Requirements): the estimated cost to perform the Rehabilitation Work on such Element at the end of its Useful Life multiplied by the lesser of (i) one or (ii) a fraction the numerator of which is the average Age each such Element will have as of the end of the current calendar year and the denominator of which is the total average Useful Life thereof, plus
  - (b) The summation across all other Elements (i.e. those Elements that have a number of years stated in the "Residual Life at Handback" column in <u>Table 23-1</u> (Residual Life Requirements at Handback) of the Technical Provisions) of the estimated cost to perform the Rehabilitation Work on each other Element that is to be performed prior to expiration of the Term in accordance with the Handback Requirements multiplied by a fraction the numerator of which is four minus the number of full calendar years until the year in which the Rehabilitation Work is scheduled to be performed pursuant to the Rehabilitation Work Schedule (as it may be revised pursuant to the Handback Requirements) and the denominator of which is four plus
  - (c) 10% of the amounts under clauses (a) and (b) above as a contingency.
- Developer's quarterly deposits in a year shall equal one-fourth of the amount required to be deposited in such year as described in <u>Section 2</u> above, provided that if Developer's aggregate actual draws during the current calendar year exceed the planned draws by more than 10% (including draws to fund Safety Compliance work allowed under <u>Section 9.2</u> of the Agreement). Developer shall increase its quarterly deposits for the remainder of the calendar year in order to make up the excess draws.
- 4. In determining the amount of Developer's deposits to be made in the current calendar year, the Parties shall take into account the total amount in the Handback Requirements Reserve Account at the end of the immediately preceding calendar year and Developer's planned draws from the Handback Requirements Reserve Account during the current calendar year.

- 5. If at any time during the course of Rehabilitation Work on an Element the actual incurred costs thereof are such that the balance in the Handback Requirements Reserve Account for such Element is less than the total amount required to be funded to the Handback Requirements Reserve Account for such Element, Developer shall promptly make an additional deposit in order to fully make up the difference.
- 6. If after completion of and payment in full for Rehabilitation Work on an Element there remains an unused balance in the Handback Requirements Reserve Account for such Element during the Term, the unused balance shall be retained in full and reallocated and credited toward required balances in the Handback Requirements Reserve Account for other Elements.

### IFA'S DISADVANTAGED BUSINESS ENTERPRISE (DBE) SPECIAL PROVISIONS

Section 103.01 of the Department's "2012 Standard Specifications," as modified by the Department's "Recurring Special Provision" 100-C-151B "Disadvantaged Business enterprise Procedure and Good Faith Efforts (Revised 05-23-11)" comprises the Disadvantaged Business Enterprise (DBE) Special Provisions, and are hereby incorporated in their entirety, as if fully set forth herein, mutalis mutandis.

# EQUAL EMPLOYMENT OPPORTUNITY TRAINEES SPECIAL PROVISIONS

Section 107.06 of the Department's "2012 Standard Specifications" comprises the Equal Employment Opportunity Trainees Special Provisions, and is hereby incorporated in its entirety, as if fully set forth herein, *mutatis mutandis*.

# **ANNUAL MAP LIMITS**

Perior	Parion	Availability
Start	Ent	Payment
	67 (07 27)	vi a
		~
		wr.
7/1/2016	6/30/2017	27,763,289
		42,950,822
		44,024,592
		45,187,360
7/1/2020	0.00000	46,189,630
77777	9/01/01/20	47,409,671
	6.000200	48,594,912
7.17.07.0	0.0002074	49,878,391
7.17.02	9/30/2020	50,984,709
774725	673072026	52,331,406
7/1/2026	0.000202	53,639,691
771767	6/30/2028	55,056,411
77.17.07.3	6/610/2/1720	56,277,579
7/1/2023	5/5/07/01/01	57,764,080
77.1720310	676107286	59,208,182
7.17.18	6731072832	60,771,976
77.17.17.2	0.010721000	62,119,918
7.5723	6/310/2/03/4	63,760,736
7.12.13.4	0.002005	65,354,755
77.00	0/01/2000	67,080,890
77.17.836	576107235	68,568,766
	27010121313	70,379,923
77.172.133	0.000	72,139,421
	0.000	74,044,751
7.77	67307234	75,687,088
7772041	5/30/2/542	77,686,266
77.19.19.2	6/30/2043	79,628,422
77.12.17.1	6/30/2044	81,731,551
774/2044	6/30/2045	83,544,383
77472045	6/30/2046	85,751,102
77.972046	6/30/2027	87,894,879
77 172047	573072046	90,216,340

0.0000000000000000000000000000000000000	92,217,367
77 2040 - 5751072050	94,653,171
78.24.50	97,019,501
7 7 7 2 8 5 1 1 1 2 1 1 1 1 2 1 3 2 3 3 3 3 3 3 3 3	33,511,599
37.17.18.2	<u> </u>

#### PAYMENT MECHANISM

#### SECTION 1 - DEFINITIONS

Capitalized terms used in this Exhibit 10 shall have the respective meanings given to them in Exhibit 1 of the PPA.

#### SECTION 2 - AVAILABILITY PAYMENT

### 2.1 Availability Payments

The Maximum Availability Payment for Fiscal Year y (MAP<sub>y</sub>) is payable in Quarterly Payments as provided in <u>Section 2.3</u> below and subject to adjustments, positive and negative, as provided in <u>Section 3</u> below.

Monthly Disbursements will be made by the IFA as partial payments of each Quarterly Payment as provided in Section 10.2.3 of the PPA.

# 2.2 Annual MAP CPI Adjustment

The Base Maximum Availability Payment (Base MAP) will be adjusted in each Fiscal Year according to changes in the CPI in accordance with Eq. 2.2. The adjustment to the Base MAP will occur on the Substantial Completion Date and at the beginning of each Fiscal Year thereafter.

Eq. 2.2:

$$MAP_{v} = ((MAP_{max})x(80\%)x(1+2.5\%)^{o} + ((MAP_{max})x(20\%)x(\frac{CPI_{v}}{CPI_{2032}})$$

Where:

MAP = the Maximum Availability Payment for Fiscal Year y.

MAP<sub>Base</sub> = the Base Maximum Availability Payment in 2012 dollars set forth in Attachment 1 to this Exhibit 10.

 $CPI_{\gamma}$  = the CPI as of July 1 of Fiscal Year y.

 $CPI_{\text{max}}$  = 231.317 (the value of CPI as of October 26, 2012), and

n = the number of Fiscal Years from October 26, 2012, including the partial fiscal year to June 30, 2013. For the avoidance of doubt, the partial fiscal year to June 30, 2013 shall be equal to 0.75.

The CPI to be used is the latest value available as of July 1, regardless of whether that CPI is seasonally adjusted.

### 2.3 Quarterly Payment

The Quarterly Payment with respect to the q<sup>th</sup> Quarter for the period after the Substantial Completion Date will be calculated in accordance with Eq. 2.3, subject to <u>Section 10.2.7</u> of the PPA:

Eq. 2.3:

$$QAP_{q,y} = \left(\frac{d_{q,y}}{d_{x}}\right) \times MAP_{y} - QPA_{q,y}$$

Where:

 $QAP_{a,v}$  = the Quarterly Payment for the q<sup>th</sup> Quarter in Fiscal Year y

 $d_{av}$  = the number of days in the q<sup>th</sup> Quarter in Fiscal Year y:

from the later of the start of the q<sup>th</sup> Quarter and the Substantial Completion Date; and

to the earlier of the end of the q<sup>th</sup> Quarter and the Termination Date.

 $d_v$  = the number of days in Fiscal Year y

MAP<sub>y</sub> = the Maximum Availability Payment for Fiscal Year y

 $QPA_{q,y}$  = the Quarterly Payment Adjustment for the q<sup>th</sup> Quarter in Fiscal Year y as calculated in accordance with Eq. 3.1 as defined in Section 3 of this Exhibit 10.

#### SECTION 3 - CALCULATION OF PAYMENT ADJUSTMENTS

#### 3.1 Quarterly Payment Adjustment

The Quarterly Payment Adjustment (QPA $_{q,y}$ ) for the q<sup>th</sup> Quarter in Fiscal Year y for the period after the Substantial Completion Date will be calculated in accordance with Eq. 3.1 as follows:

Eq. 3.1:

$$QPA_{\sigma,v} = QUA_{\sigma,v} + QNA_{\sigma,v} + QOA_{\sigma,v}$$

Where:

 $QPA_{q,y}$  = Quarterly Payment Adjustment for the qth Quarter in Fiscal Year y

 $QUA_{a,y}$  = Quarterly Unavailability Adjustment for the q<sup>in</sup> Quarter in Fiscal Year y (as calculated in accordance with Eq. 3.4)

 $QNA_{a,y}$  = Quarterly Noncompliance Adjustment for the q<sup>th</sup> Quarter in Fiscal Year y(as) calculated in accordance with Eq. 3.7)

 $QOA_{q,y}$  = Quarterly Other Payment Adjustments for the qth Quarter in Fiscal Year y (as defined in Section 3.8 of this Exhibit 10)

#### 3.2 RESERVED

#### 3.3 RESERVED

# 3.4 Quarterly Unavailability Adjustment

Subject to the limitations in <u>Section 3.6</u> below, the Quarterly Unavailability Adjustment (QUA<sub>q,y</sub>) for each Unavailability Event, except for those addressed in the PPA <u>Section 15.11</u>, in the q<sup>in</sup> Quarter in Fiscal Year y for the period after the Substantial Completion Date will be calculated in accordance with Eq. 3.4 as follows:

Eq. 3.4:

$$QUA_{q,y} = \sum_{c=1}^{n} UA_{c}$$

Where:

 $QUA_{q,y}$  = Quarterly Unavailability Adjustment for the q<sup>th</sup> Quarter in Fiscal Year y

UA<sub>e</sub> = the Unavailability Adjustment for a single Unavailability Event that occurs during the q<sup>th</sup> Quarter in Fiscal Year y as calculated in accordance with <u>Section</u> 3.5 of this <u>Exhibit 10</u>.

e = a single Unavailability Event in the q<sup>th</sup> Quarter of Fiscal Year y

n = the number of Unavailability Events in the q<sup>th</sup> Quarter of Fiscal Year y

#### 3.5 Unavailability Adjustment for a Single Unavailability Event

The Unavailability Adjustment for a single Unavailability Event ( $UA_e$ ) is the product of the MAP factors defined by the Crossing Section, the Type of Day, the Availability Period and the Level of Lane Availability. Specifically:

- the Project has been divided into three Crossing Sections
- the year has been divided into three Types of Day
- · each day has been divided into four Availability Periods
- Level of Lane Availability is based on six layouts of running lanes available, with and without shoulders

The Unavailability Adjustment for a single Unavailability Event (UA<sub>e</sub>) will be calculated in accordance with Eq. 3.5 as follows:

Eq. 3.5:

$$UA_e = MAP_v \times S \times D \times P \times T \times (t/H)$$

#### Where:

- S = The Crossing Section factor from <u>Table 1</u> for the section of the Crossing that was affected by the Unavailability Event. In the case of an event that affects more than one section, S will equal the sum of the factors in <u>Table 1</u> for the Crossing Sections affected.
- D = The Type of Day Factor from <u>Table 2</u> for the type of day on which the Unavailability Event occurred. Events that affect more than one calendar day will be considered separate events.
- P = The Unavailability Period Factor from <u>Table 3</u> for the time period in which the Unavailability Event occurred. In the case of an event that affects more than one time period on a given calendar day, P will equal the sum of the factors in Table 3 for the time periods affected.
- T = Adjustment factor for the number of lanes or shoulders affected by the Unavailability Event.
- t = Length of time over which the Unavailability Event occurred, measured in 30 minute increments, rounding to the next 30 minute increment. An Unavailability Event of 5 minutes for example would be measured as 30 minutes. A 31 minute Unavailability Event would be measured as 60 minutes.
- H = Length of time the Unavailability Period during which the Unavailability Event occurred, measured in minutes.]

#### 3.5.1 Crossing Section Factor (S)

The Crossing is divided into three Sections weighted as follows:

Table 1.

Section	Description	Crossing Section Factor (S)
А	River Road (KY) to Old Salem Road (IN)	45%
В	Old Salem Road to SR62/Port Rd/SR265 Interchange	45%
С	SR62/Port Rd/SR 265 Interchange to North Project Limit	10%

### 3.5.2 Type of Day Factor (D)

Each day of the year is classified and weighted as follows:

Table 2.

Type of Day	Number of Days per Year (A)	Relative Weight (B)	Type of Day Factor (D) (B/A)
Standard Weekday	253	80%	0.3162%
Saturday	52	12%	0.2308%
Sunday or Holiday	60	8%	0.1333%
Total	365*	100%	NA

<sup>\*</sup> No adjustments for leap year.

# 3.5.3 Unavailability Period Factor (P)

Each day is divided into five Unavailability Periods weighted as follows:

Table 3.

Time of Day	Unavailability Period	Description	Time Period (Eastern time)	Unavailability Period Factor (P)
Standard Weekday	Α	Morning	06.00 11.00	30%
	В	Midday	11.00 15.00	20%
ACCACACACACACACACACACACACACACACACACACA	А	Afternoon	15.00 - 19.00	30%
	В	Evening	19.00 22.00	15%
000000000000000000000000000000000000000	В	Night	22.00 - 06:00	5%
Total				100%
Saturday	8	Morning	06.00 11.00	25%
	В	Midday	11.00 – 15.00	20%
	8	Afternoon	15.00 19.00	25%
	В	Evening	19.00 – 22.00	20%

	В	Night	22.00 - 06:00	10%
Total				100%
Sunday and Holidays	В	Morning	06.00 12.00	20%
(10//2/2)	8	Midday	12.00 16.00	25%
	8	Afternoon	16.00 - 19.00	25%
	В	Evening	19.00 22.00	20%
	В	Night	22.00 - 06:00	10%
Total			***************************************	100%

# 3.5.4 Unavailability Type Factor (T)

The Unavailability Adjustment for any particular type of Unavailability Event is calculated as a percentage of the MAP, based on the number of lanes available relative to the number of open roadway lanes and shoulders on the Crossing section affected in accordance with the following table showing the percentage deduction to the MAP:

Table 4.

Four-Lane Bridge or Roadway	3	ayout of I		Longe Av	ailabla		
(2 Lanes in Each Direction)		2+1	1+1	2+0	1+0	Ω+0	
2+2 2+1 1+1 2+0 1+0 0+0  Shoulder(s) are open							
Unavailability Type Factor (T)	0%	35%	65%	75%	85%	100%	
Shoulder(s) are closed							
Unavailability Type Factor (T)	5%	40%	70%	80%	90%	100%	

In addition:

 If one or more contra-flow lanes are used, the Unavailability Type Factor (T) in Table 4 will be increased by the addition of 10% to factors noted. If any part of a ramp or interchange is unavailable, the Unavailability Type Factor
 (T) in <u>Table 4</u> will be increased by the addition of 10% to the factors noted.

In any event, the Percentage of MAP Payable will never be less than 0.

Where more than one type of Unavailability Event occurs during the same Availability Period, the Unavailability Adjustment associated with each event will be calculated and only the largest adjustment will be applied.

In relation to Emergency Closures, a maximum period of 1-hour of additional closure time, commencing at the time when the lane is handed back into the control of Developer by the Emergency Services and Developer has completed any required repairs, will be allowed before an Unavailability Event is triggered; however, the additional closure time shall only be used as necessitated by the Emergency Closure and not for any other purpose.

### 3.6 Unavailability Adjustments for Planned Maintenance

Developer will be assessed Unavailability Adjustments for all Unavailability Events during Unavailability Period A, including Closures due to Planned Maintenance, but excluding any other Permitted Closures as per Section 3.7 below of this Exhibit 10. Developer will not be assessed Unavailability Adjustments for Unavailability Events during Unavailability Period B for any Permitted Closure including Planned Maintenance, provided that Planned Maintenance does not exceed 120 calendar days per year, as per Section 22.4.1.1 of the Technical Provisions.

# 3.7 Limitations on Quarterly Unavailability Adjustment

Notwithstanding <u>Section 3.6</u> above, the total Quarterly Unavailability Adjustment with respect to the q<sup>th</sup> Quarter will be the lesser of:

QUA<sub>q,y</sub> as calculated in Eq. 3.4, and MAP<sub>y</sub> x 
$$\left(\frac{d_{xx}}{d_y}\right)$$

For clarity, no Unavailability Adjustment will be applied with respect to any Permitted Closure, except for Unavailability Events for Planned Maintenance during Unavailability Period A, in accordance with <u>Section 3.6</u> above of this <u>Exhibit 10</u>. No Unavailability Adjustment will be applied to Unavailability Events respecting an affected East End Crossing portion first occurring during a period of step-in by IFA, as provided in <u>Section 11.7.1.5</u> of the Agreement.

# 3.8 Quarterly Noncompliance Adjustment

A single O&M Period Noncompliance Point shall equal \$5,000 per point.

The Quarterly Noncompliance Adjustment,  $QNA_{q,y}$  with respect to each Noncompliance Event whose Noncompliance Point Adjustment is applied in or occurs during the  $q^{th}$  Quarter of Fiscal Year y after the Substantial Completion Date, will be determined in accordance with Eq. 3.8 as follows:

Eq. 3.8:

$$QNA_{q,y} = \sum_{y=1}^{n} NCA_{y} \times (\$5,000 \times \frac{CPI_{y}}{CPI_{2012}})$$

Where:

 $QNA_{qy}$  = Quarterly Noncompliance Adjustment for the q<sup>th</sup> Quarter of Fiscal Year y

- $NCA_x$  = the number of Noncompliance Points related to the Noncompliance Event x whose adjustment is applied in or occurs during the  $q^{th}$  Quarter in Fiscal Year y during the Operating Term as determined by reference to <u>Attachment 1</u> of <u>Exhibit</u> 12 to the PPA.
- n = the total number of Noncompliance Events occurring in or whose Noncompliance Adjustments are applied in the  $q^{th}$  Quarter of Fiscal Year y
- $\dot{x}$  = a Noncompliance Event as defined in <u>Attachment 1</u> of <u>Exhibit 12</u> to the Agreement

The assessment of Noncompliance Points with respect to each Noncompliance Event shall be undertaken in accordance with <u>Article 11</u> of the Agreement.

# 3.9 Quarterly Other Payment Adjustment

Quarterly Other Payment Adjustments are positive or negative adjustments according to Sections 10.2.3.2 (d), 15.5, 16.1.6, 16.2.5, 17.1.8, 17.1.9.10, 19.2.5.5 and 19.2.5.6 of the Agreement.

#### SECTION 4 - MILESTONE PAYMENT

#### 4.1 Milestone Payment

Milestone Payments will be as shown in Exhibit 4 of the Agreement.

The Substantial Completion Milestone Payment Amount will be adjusted in accordance with Section 4.2 below.

#### 4.2 Substantial Completion Milestone Payment Adjustment

A single Construction Noncompliance Point shall equal \$5,000 per point.

Substantial completion Milestone Payment Amount = SCMP - Lesser of (SCMPAC) or (SCMPA)

Where:

SCMP = Substantial Completion Milestone Payment shown in Exhibit 4 of the Agreement

SCMPAC = the amount of the Substantial Completion Milestone Payment Adjustment Cap which shall be \$10,000,000.

The Substantial Completion Milestone Payment Adjustment (SCMPA) will be determined in accordance with Eq. 4.2 as follows:

# Eq. 4.2:

$$SCMPA = \sum_{s=1}^{n} CNCA_{s} \times (\$5,000 \times \frac{CPI_{s}}{CPI_{2ms}})$$

#### Where:

CNCAx ≈ is the Construction Noncompliance Adjustment related to the Construction Noncompliance Event x that occurs during the construction period between NTP2 and the Substantial Completion Date and which is subject to Construction Noncompliance Adjustments, as determined by reference to <a href="https://doi.org/10.1007/jhtml.com/html/">https://doi.org//>jhtml.com/html/>jhtml/</a>. Adjustments, as determined by reference to <a href="https://doi.org//>jhtml.com/html/">https://doi.org//>jhtml/</a>. Attachment 1 of <a href="https://doi.org//>jhtml.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.com/html.

- n = the total number of Construction Noncompliance Events occurring during the construction period between NTP2 and the Substantial Completion Date
- x = a Noncompliance Event as defined in <u>Attachment 1</u> of <u>Exhibit 12</u> to the Agreement

# 4.3. Limitations on Milestone Payments

When milestone payments are earned, payments will be made up to the lowest limiting amount that is in effect at that time, with additional monthly payments being due, subject to the actual limiting amount each month until all milestone payments that have been earned are paid.

1. Milestone payments will be limited to the maximum aggregate milestone payment schedule as follows:

a.	Thr ough J	June 30,	2013	\$44,000,000
b.	Thr ough J	June 30,	2014	\$73,000,000
C.	Through J	June 30,	2015	\$122,000,000
d.	Thr ough J	June 30,	2016	\$176,000,000
ė.	Thr ough J	June 30,	2017	\$392,000,000
f.	Through J	June 30.	2018	\$392,000.000

 Milestone payments will be limited to actual earned value of work completed as determined by Developer's monthly schedule status report as approved by IFA.

#### Attachment 1 to Exhibit 10

 $MAP_{\text{flase}}$  = thirty-two million, nine hundred nineteen thousand, nine hundred fifty-three dollars (\$32,919,953)

The Parties acknowledge that the foregoing MAP<sub>Base</sub> shall be updated from the Financial Model at Financial Close by amendment to this Agreement.

[reserved]

# NONCOMPLIANCE POINTS SYSTEM AND PERSISTENT DEVELOPER DEFAULT

# 1. Noncompliance Points System

The table attached as Attachment 1 to this Exhibit 12 identifies Developer failures and breaches that may result in the assessment of Noncompliance Points, the number of Noncompliance Points that may be assessed for each such failure or breach, and the cure period available to Developer for each such failure or breach, other than for Developer's failure to submit a deliverable by its due date.

# 2. Trigger Points for Persistent Developer Default and Uncured Noncompliance Points

- 2.1 A Persistent Developer Default under <u>clause (a)</u> of the definition thereof shall exist entitling IFA to require submittal of Developer's remedial plan under <u>Section 19.2.6</u> of the Agreement, on any date (whether before or after the Substantial Completion Date) that:
- (a) The cumulative number of Noncompliance Points assessed during any consecutive 365-day period (excluding any Noncompliance Points assessed for cured Noncompliance Events during the period prior to the Substantial Completion Date) equals or exceeds the following.
- (i) For any consecutive 365-day period ending prior to the Substantial Completion Date, 140:
- (ii) For any consecutive 365-day period a portion of which includes any days prior to the Substantial Completion Date, 140; and
  - (iii) For any other consecutive 365-day period, 100.
- (b) The cumulative number of Noncompliance Points, cured or uncured, assessed during any consecutive 1095-day period (excluding any Noncompliance Points assessed for cured Noncompliance Events during the period prior to the Substantial Completion Date) equals or exceeds the following:
- (i) For any consecutive 1095-day period ending prior to the Substantial Completion Date, 270;
- (ii) For any consecutive 1095-day period a portion of which includes any days prior to the Substantial Completion Date, but includes not more than 365 days outside such period, 270; and
- (iii) For any consecutive 1095-day period a portion of which includes any days prior to the Substantial Completion Date, but includes more than 365 and not more than 730 days outside such period, 250; and
- (iv) For any consecutive 1095-day period a portion of which includes any days prior to the Substantial Completion Date, but includes more than 730 and not more than 1094 days outside such periods, 225; and

- (v) For any other consecutive 1095-day period, 200.
- 2.2 A Persistent Developer Default under <u>clause (b)</u> of the definition thereof shall exist entitling IFA to require submittal of Developer's remedial plan under <u>Section 19.2.6</u> of the Agreement, on any date (whether before or after the Operating Period commences) that the cumulative number of breaches or failures to perform within <u>clause (b)</u> of the definition of Persistent Developer Default during any consecutive 365-day period equals or exceeds the following:
- (a) For any consecutive 365-day period ending prior to the Substantial Completion Date, 90;
- (b) For any consecutive 365-day period a portion of which includes any days prior to the Substantial Completion Date, 90; and
  - (c) For any other consecutive 365-day period, 60.
- 2.3 The number of cured Noncompliance Points that would otherwise then be counted under this <u>Section 2</u> is subject to reduction in accordance with <u>Section 19.2.6.3</u> of the Agreement.

# **ATTACHMENT 1 TO EXHIBIT 12**

### **ASSESSMENT CATEGORIES**

Category	Cure Periods	Assessment of Noncompliance Points
A	Cure period shall be deemed to start upon the date and time Developer first obtained knowledge of, or reason to know of, the Noncompliance Event. For this purpose Developer shall be deemed to first obtain knowledge of the Noncompliance Event not later than the date of delivery of the Notice of Determination to Developer, as described in Section 11.2.3.2 of the PPA.	If a category "A" Noncompliance Event is not fully and completely cured within the cure period, Noncompliance Points shall first be assessed at the end of the first cure period, and shall be assessed again at the end of each subsequent cure period (of duration equal to the prior cure period), as described in Sections 11.3.5 and 11.3.6 of the PPA.
В	Cure period shall be deemed to start upon the date and time on which the Noncompliance Event occurred, regardless of whether IFA delivered a Notice of Determination to Developer, as described in Section 11.2.3.3 of the PPA.	If a category "B" Noncompliance Event is not fully and completely cured within the cure period. Noncompliance Points shall first be assessed at the end of the first cure period, and shall be assessed again at the end of each subsequent cure period (of duration equal to the prior cure period), as described in Sections 11.3.5 and 11.3.6 of the PPA.
С	No cure period applicable.	Noncompliance Points shall first be assessed on the date of the initial Notice under Section 19.2 of the PPA, as described in Section 11.3.8 of the PPA.

# NONCOMPLIANCE POINTS SYSTEM

# PRE-SUBSTANTIAL COMPLETION NONCOMPLIANCE POINTS SYSTEM

Ref	Main Heading	Subheading	Failure to:	Assess- ment Category	Cure Period	Number of Points	Construction Noncompliance Event
1	Design and Construction	Access to Adjacent Properties	Maintain ingress and egress to adjacent properties as required under <u>Section 12</u> of the Technical Provisions.	В	4 Hours	5	Yes
2	Environmental Compliance	Noise	Comply with <u>Section 7.7</u> of the Technical Provisions with respect to noise.	В	1 Hour	2	Yes
3	Environmental Compliance	Contravention of Environmental Approvals	Follow the Environmental Approvals required in <u>Section 7</u> of the Technical Provisions.	А	1 Day	2	Yes
4	Project Management	Inspection	Comply with a requirement of any Section of the Technical Provision or of the PPA with regard to inspection, except where provided elsewhere in this Attachment 1.	6	2 Days	2	Yes
5	Design and Construction	Traffic Management	Conform to the restrictions of <u>Sections</u> 12.4.3 and 12.4.7 of the Technical Provisions.	В	20 Minutes	1	Yes
6	Project Management	Safety	Observe the requirements of the safety plan; or to carry out any construction, operation or maintenance activity; in contravention of (or in absence of) the safety plan or in a manner that represents a hazard to project workers or the general public in accordance with Section 6.5.5 of the Technical Provisions.	A	1 Day	1	Yes

7	Project Management	Quality Management	Establish, maintain updated and comply with the requirements of a Quality Management Plan in accordance with Section 2 of the Technical Provisions.	В	7 Days	1	Yes
8	Contracting and Labor Practices	Compliance with DBE plan	Comply with the requirements of <u>Section</u> 7.10 of the PPA in connection with the Disadvantaged Business Enterprise (DBE) Program.	В	30 Days	1	Yes
9	Contracting and Labor Practices	Compliance with Workforce Diversity and Small Business Performance Plan	Comply with the requirements of <u>Section</u> 7.11 of the PPA in connection with the Workforce Diversity and Small Business Performance Plan	В	30 Days	1	Yes
10	General	IFA access	Comply with any of the provisions of Section 3.4 (Oversight, Inspection and Testing), Section 7.1 (Disclosure of Contracts and Contractors), Section 12.1 (Financial Model Updates), and Article 23 (Records and Audits; Intellectual Property) of the PPA, with respect to access for IFA's Authorized Representative(s) to the Project, Developer's Project offices and operations buildings, and Developer's data.	C	None	2.	No
11	General	Notification of breach	Notify IFA of the occurrence of any Noncompliance Event specified in this Attachment 1 in accordance with Sections 11.2.1 and 19.1.1.12 of the PPA.	А	1 Day	2	No
12	Insurance	Verification of coverage	Comply with the requirements of <u>Article 17</u> of the PPA.	В	15 Days	1	No

13	Project Management	Deliverables	Prepare, implement, maintain, update or submit a plan, a report, a deliverable or a submittal required by, or compliant with, any Section of the Technical Provisions or of the PPA, except where provided elsewhere in this <a href="https://example.com/Attachment1">Attachment 1</a> .	В	7 Days	1	No
14	Reserved						
15	General	Governmental Approval	Deliver to IFA any executed copy of a Governmental Approval prior to beginning construction activities as required by Section 5.6 and Section 4.3 of the PPA.	В	7 Days	1	No
16	General	Governmental Approval	Submit any application for a Governmental Approval to IFA for approval or review and comment prior to submitting to any Governmental Entity as required by Section 4.3.3 of the PPA.	В	7 Days	1	No
17	Environmental Compliance	Notification	Promptly notify IFA of Hazardous Materials as set forth in <u>Section 5.9.3</u> of the PPA.	В	1 Day	2	No
18	Environmental Compliance	Mitigation	Take reasonable steps to mitigate the effects of Hazardous Materials as set forth in Sections 5.9 and 15.15 of the PPA.	В	2 Days	5	No
19	Utility Adjustments	Maintain Service	Use Good Industry Practice to prevent damage to or interruption of a utility service in accordance with Section 18.1.4 of the Technical Provisions.	C	None	3	No
20	Design and Construction	Construction Warranties	Ensure extension of third parties warranties to IFA or failure to correct any defective Work that would void any such warranty as required by Section 5.11.2 and of the PPA.	А	30 Days	1	No
21	Design and	Implementatio n of Directive	Proceed with Directive Letters in	A	5 Days	3	No

	Construction	Letters	accordance with <u>Section 16.3</u> of the PPA.				
22	Design and Construction	Traffic Management	Comply with the requirements of the Traffic Management Plan.	В	4 Hours	2	No

# **O&M PERIOD NONCOMPLIANCE POINTS SYSTEM**

Ref	Main Heading	Subheading	Failure to:	Assess- ment Category	Cure Period	Number of Points
1	General	IFA access	Comply with any of the provisions of Section 3.4 (Oversight, Inspection and Testing), Section 7.1 (Disclosure of Contracts and Contractors), Section 12.1 (Financial Model Updates), and Article 23 (Records and Audits; Intellectual Property) of the PPA, with respect to access for IFA's Authorized Representative(s) to the Project, Developer's Project offices and operations buildings, and Developer's data.	С	None	2
2	General	Final Acceptance	Achieve Final Acceptance by the Final Acceptance Deadline as described in <u>Section 5.8.5</u> of the PPA.	В	1 Day	.5
3	General	Notification of breach	Notify IFA of the occurrence of any Noncompliance Event specified in this <u>Attachment 1</u> in accordance with <u>Sections 11.2.1</u> and <u>19.1.1.12</u> of the PPA.	А	1 Day	2
4	Insurance	Verification of coverage	Comply with the requirements of <u>Article 17</u> of the PPA.	В	15 Days	1
5	Contracting and Labor Practices	Affiliates	Submit a copy of the proposed contract with an Affiliate in accordance with Section 7.6.2 of the PPA.	В	7 Days	1
6	Contracting and Labor Practices	Disclosure of Contracts and Contractors	Provide IFA with a list of all Contracts, Contractors, guarantees of Key Contracts and the guarantors with each monthly report required under this PPA or the Technical Provisions in accordance with Section 7.1.1 of the PPA.	В	7 Days	1
7	Contracting and Labor	Notification of Contractors	Comply with the requirements of Section 7.7 of the PPA.	8	14 Days	1

Ref	Main Heading	Subheading	Failure to:	Assess- ment Category	Cure Period	Number of Points
*****************	Practices					
8	Reserved					
9	Project Management	Audit	Carry out internal audits of the Project Management Plan at the times prescribed in the Project Management Plan in accordance with Section 3.2.7 of the PPA.	В	7 Days	1
10	Project Management	Deliverables	Prepare, implement, maintain, update or submit a plan, a report, a deliverable or a submittal required by, or compliant with, any Section of the Technical Provisions or of the PPA, except where provided elsewhere in this			

Ref	Main Heading	Subheading	Failure to:	Assess- ment Category	Cure Period	Number of Points
16	Project Management	Quality Management	Establish, maintain updated and comply with the requirements of the Quality Management Plan in accordance with <u>Section 2</u> of the Technical Provisions.	A	7 Days	2
17	Project Management	Safety	Observe the requirements of the safety plan; or to carry out any construction, operation or maintenance activity; in contravention of (or in absence of) the safety plan or in a manner that represents a hazard to project workers or the general public in accordance with Section 6.5.5 of the Technical Provisions.	А	1 Day	3
18	Project Management	Submission	Develop and submit a part of, or change, addition or revision to, the PMP at the time required in accordance with <u>Sections 3.2.2</u> or <u>3.2.4</u> of the PPA.	В	14 Days	1
19	Environmental Compliance	Notification	Notify IFA of Hazardous Materials or a Recognized Environmental Condition as set forth in Section 5.9.3 of the PPA.	А	1 Day	1
20	O&M	Category 1 Defect	Mitigate a hazard for a Category 1 defect within the time period shown in the Performance and Measurement Table.	A	See Performance and Measurement Table	3
21	O&M	Category 1 Defect	Implement a permanent remedy for a Category 1 defect within the time period shown in the Performance and Measurement Table.	A	See Performance and Measurement Table	2
22	O&M	Category 2 Defect	Implement a permanent repair for a Category 2 defect within the time period shown in the	Α	See Performance	1

Ref	Main Heading	Subheading	Failure to:	Assess- ment Category	Cure Period	Number of Points
			Performance and Measurement Table.		and Measurement Table	
23	O&M	Reporting Records Accuracy	Report Defects or Noncompliance points in the Operations Reports as required per Section 22.6 of the Technical Provisions.	A	7 Days	5
24	O&M	Traffic Operations Restrictions	Comply with a traffic operations restrictions set forth in Article 6 of the PPA (each instance).	8	1 Day	1
25	O&M	Availability Payment Documentation	Provide supporting documentation with the draft Availability Payment invoice.	В	7 Days	5
26	O&M	O&M Plan	Comply with the requirements of Operations and Maintenance Plan not specifically identified elsewhere in this <u>Attachment 1</u> .	В	14 Days	1
27	O&M	O&M Work Files	Maintain current and accurate files, and make them available for inspection and audit, related to the O&M Work per requirements of <u>Sections 22.1.10</u> and <u>22.7.2</u> of the Technical Provisions.	В	15 Days	3
28	O&M	Operations Report	Submit Operations Report per requirements of Section 22.2.2 of the Technical Provisions.	В	7 Days	5
29	O&M	Maintenance Work Report	Submit Maintenance Work Report per requirements of Section 22.4.1.3 of the Technical Provisions.	8	7 Days	5
30	O&M	Maintenance Plan	Submit an annual Maintenance Plan per requirements of <u>Section 22.4.1</u> of the Technical Provisions.	В	14 Days	3
31	O&M	Notification Regarding Planned Roadway	Notify and/or coordinate with public agencies (INDOT, KYTC, Louisville Metro, etc.) regarding planned Segment Closures per the requirements of	С	None	3

Ref	Main Heading	Subheading	Failure to:	Assess- ment Category	Cure Period	Number of Points
		Closures	Section 22.2.3 of the Technical Provisions.			
32	Reserved					
33	O&M	Operations Staffing Levels	Maintain the operations staffing levels in accordance with the requirements of Section 22 of the Technical Provisions and the PMP.	А	30 Days	4
34	O&M	Hazardous Materials Management Plan	Implement a Hazardous Materials policy in accordance with the requirements of Section 7.9 of the Technical Provisions.	8	14 Days	4
35	O&M	Inspection Obligations	Perform Developer's inspection obligations per the requirements of <u>Section 22</u> of the Technical Provisions.	A	1 Day	1
36	O&M	Snow and Ice Control Plan	Submit an annual Snow and Ice Control Plan per the requirements of Section 22.3.1.12.2 of the Technical Provisions.	В	14 Days	3
37	M&O	Winter Patrol Diary	Make available the Winter Patrol Diary per the requirements of <u>Section 22.3.1.12.4</u> of the Technical Provisions.	В	1 day	4

### EXHIBIT 13

# LIST OF INITIAL FUNDING AGREEMENTS

# AND INITIAL SECURITY DOCUMENTS

[TO BE PROVIDED AT FINANCIAL CLOSE]

**Funding Agreements** 

Security Documents

#### EXHIBIT 14

### CALCULATION AND PAYMENT OF REFINANCING GAIN

# Section 1. Data and Projections Required for the Calculation of the Refinancing Gain

Developer must notify IFA as soon as practicable of its interest in proceeding with a Refinancing and the proposed schedule for documenting and closing the proposed Refinancing other than an Exempt Refinancing.

Developer shall provide the following information at least 35 days in advance of the scheduled Refinancing date:

- (a) The Financial Model with the original projections duly adjusted for any changes in the East End Crossing structure (e.g. IFA Changes);
- (b) Details of the actual timing and amounts of Committed Investment from the Effective Date to the scheduled Refinancing date;
- (c) Details of the actual timing and amounts of Distributions to Equity Members or any of their Affiliates from the Effective Date to the scheduled Refinancing date:
- (d) Information on the actual cash flow of Developer from the Effective Date to the scheduled Refinancing date, set out under the same headings as the Financial Model;
- (e) Term sheet and other relevant information on the terms of the Refinancing;
- (f) A pre-Refinancing Financial Model, which does not take into account the effects of the Refinancing, as updated by Developer (i) for any changes in the East End Crossing and based on the actual performance of the East End Crossing to the date of calculation and other macroeconomic assumptions and (ii) with projections for the cash flow of Developer from the estimated Refinancing date to the end of the Term, including projected Distributions ("Pre-Refinancing Financial Model");
- (g) A post-Refinancing Financial Model which fully takes into account the effects of the Refinancing as projected on the basis of the term sheet and new Funding Agreements, as updated by Developer (i) for any changes in the East End Crossing and based on the actual performance of the East End Crossing to the date of calculation and other macroeconomic assumptions and (ii) with projections for the cash flow of Developer from the scheduled Refinancing date to the end of the Term, including projected Distributions and all costs incurred in connection with the Refinancing ("Post-Refinancing Financial Model");
- (h) A calculation of the Refinancing Gain based on the above and the provisions described below; and
- (i) Information on the assumptions for the projections in the Pre-Refinancing Model and Post-Refinancing Financial Model.

For the purposes of this Exhibit, "Pre-Refinancing Equity IRR" means the Equity IRR calculated

in the Pre-Refinancing Financial Model and "Post-Refinancing Equity IRR" means the Equity IRR calculated in the Post-Refinancing Financial Model.

The Pre-Refinancing Equity IRR and Post-Refinancing Equity IRR shall be calculated for the entire Term taking into account:

- (a) Timing and amounts of the investment by Equity Members:
- (b) Distributions received by Equity Members up to the estimated Refinancing date; and
- (c) Projected Distributions as shown in the Financial Model immediately prior to the Refinancing or immediately after the Refinancing, as applicable.

### Section 2 Calculation of the Refinancing Gain

The Refinancing Gain for any Refinancing other than an Exempt Refinancing will be equal to the greater of zero and [(A-B)-C] where:

- A = the Net Present Value of the Distributions to be made from the estimated Refinancing date to the end of the Term as projected in the Post-Refinancing Financial Model, discounted using the Pre-Refinancing Equity IRR;
- B = the Net Present Value of the Distributions to be made from the estimated Refinancing date to the end of the Term as projected in the Pre-Refinancing Financial Model, discounted using the Pre-Refinancing Equity IRR; and
- C = any adjustment required to raise the Pre-Refinancing Equity IRR to the Original Equity IRR as described in <u>Section 3</u> below.

For purposes of this Exhibit, "Net Present Value" means the aggregate of the discounted values, calculated as of the estimated date of the Refinancing, of each of the relevant projected Distributions, in each case discounted using the Original Equity IRR.

For the avoidance of doubt, "Refinancing Gain" excludes the portion of gain, if any, (calculated as provided above) from the first Refinancing that is less than or equal to that shown in the Financial Model and incorporated into the Financial Model. Any gain from the first Refinancing (calculated as provided above) in excess of the gain therefrom as shown in the Financial Model shall constitute Refinancing Gain.

#### Section 3 Adjustment to Raise the Pre-Financing Equity IRR to the Equity IRR

If the Pre-Refinancing Equity IRR is lower than the Original Equity IRR, a calculation will be done to determine the amount of Distributions which, if received by Equity Members at the estimated Refinancing date, would increase the Pre-Refinancing Equity IRR to the Original Equity IRR (while the MAP is maintained and the minimum prevailing debt covenants established in the Funding Agreements are not violated). The determination of this amount of Distributions needed to achieve the Original Equity IRR shall be treated as Project Debt, rather than Committed Investment, any initial Committed Investment in excess of the maximum permitted initial Committed Investment under Section 13.7.9 of the Agreement. This amount of Distributions will be deducted as factor C in Section 2 above and IFA will only be entitled to receive 60% of the remaining balance as the Refinancing Gain.

### Section 4 Payment of Department's Portion of Refinancing Gain

IFA will receive payment of its portion of the Refinancing Gain as a reduction in the Availability Payments over all or a portion of the Term, subject to the following provisions:

- (a) IFA will not receive its portion of the Refinancing Gain faster than the Equity Members of Developer; and
- (b) If the Refinancing involves raising new debt or otherwise increasing the amount of outstanding Project Debt anticipated in any Fiscal Year of the Financial Model, IFA may elect to receive its portion as a lump sum payment concurrently with the close of the Refinancing.

### Section 5 Final Calculation and Payment

Developer shall perform a final calculation of the Refinancing Gain and deliver the results to IFA within 15 days after the close of the Refinancing.

#### EXHIBIT 15

### SUMMARY OF TERMS FOR CUSTODY AGREEMENT

- 1. <u>Revenues Covered</u>. The Custody Agreement will encompass all Toll Revenues, including payments by cash or check, or electronic funds transfer.
- 2. <u>Custodial Accounts</u>. The Custody Agreement will provide for the establishment and maintenance of the following separate custodial securities accounts (or separate custodial trust accounts) (collectively "Custodial Accounts"):
- (a) An account for all collected Toil Revenues from all sources ("Toil Revenue Collections Account");
- (b) An account to hold all funds prepaid by Transponder customers ("Prepaid Customers Account");
  - (c) Indiana Revenue Share Account:
  - (d) Kentucky Revenue Share Account.
- 3. <u>Lockbox Account</u>. The Custody Agreement will provide for establishment and maintenance of a separate lockbox account for incoming Toll Revenue receipts and receipts relating to prepaid accounts of Transponder customers ("Lockbox Account").
- 4. <u>Withdrawal, Transfer and Replenishment Mechanics</u>. The Custody Agreement will include provisions providing for the mechanics of withdrawals from or transfers among the accounts as well as deposits to the Prepaid Customers Account from account customer replenishments, to occur on a daily basis on all days the Custodian is open for business, including the following:
- (a) For daily processing of deposits to the Lockbox Account and daily transfer of cleared deposits to the appropriate Custodial Accounts:
- (b) For daily withdrawal of funds in the Prepaid Customers Account and transfer thereof into the appropriate account or to designated customers owed refunds or credits, including upon closure of customer accounts, in accordance with instructions from the Toll Operator;
- (c) For daily deposits to the Prepaid Customers Account from payments made by Transponder account customers upon opening or replenishment of their customer accounts; and
- (d) IFA's obligation to direct, or cause the Toll Operator to direct, such movement of funds, and the rights of IFA to enforce such obligation, including the right to step-in and direct such movement of funds upon any failure to properly do so.
- (e) For daily withdrawal of (i) the Indiana Revenue Share from the Toll Collections Account to the Indiana Revenue Share Account held under the Custody Agreement for transfer from such account to the Project Trustee for deposit in the Toll Revenue Fund held

under the Project Trust Agreement and (ii) the Kentucky Revenue Share from the Toll Collections Account to the Kentucky Revenue Share Account for transfer from such account directly to the trustee on behalf of the holders of the bond issued by KPTIA or such other account as directed in writing by KPTIA.

- 5. <u>Custodian Obligations</u>. The Custody Agreement will include the Custodian's agreement to withdraw, transfer and deposit funds in accordance with the provisions set forth in the Custody Agreement.
- 6. <u>Designated Beneficiaries</u>. IFA with respect to the Indiana Revenue Share held in the Custodial Accounts and the Lockbox Account will be the sole designated beneficiaries of such amounts. KPTIA and the trustee acting on behalf of the holders of bonds issued by KPTIA with respect to the Kentucky Revenue Share KPTIA held in the Custodial Accounts and the Lockbox Account will be the sole designated beneficiaries of such amounts. With respect to such beneficiary interests, the Custody Agreement shall:
- (a) Include the Custodian's acknowledgement of the beneficial rights of IFA and KPTIA to pledge their rights as a designated beneficiary to any of their creditors;
- (b) Expressly state the intention of the parties that the Custody Agreement and arrangements described therein are intended to keep collected Toll Revenues out of the possession of KPTIA, KPTIA's bond trustee, Developer and IFA, and to isolate them with the Custodian until appropriate allocation pursuant to the Custody Agreement, the Project Trust Agreement with respect to the Indiana Revenue Share and the trust indenture relating to KPTIA's bonds with respect to the Kentucky Revenue Share;
- 7. <u>Toll Revenue Ownership</u>. The Custody Agreement will include express confirmation by IFA, KPTIA and the Custodian that all Toll Revenues collected by the Toll Operator belong to and are the property of IFA and KPTIA, and are not the property or assets of Developer or the Custodian, and that in performing its collection services the Toll Operator is acting as an intermediary and agent for IFA and KPTIA in respect of all Toll Revenues.
- 8. <u>Monitoring</u>. The Custody Agreement will include specific provisions designed to enable the beneficiaries to monitor the operation of the Custodial Accounts and Lockbox Account and the Toll Operator's performance of its anticipated functions thereunder, including calculation of Indiana Revenue Share and Kentucky Revenue Share, notice provisions regarding certain events (such as the Toll Operator not providing any required notice, certificate or filing as contemplated by the Custody Agreement).
- 9. <u>Miscellaneous</u>. The Custody Agreement will include miscellaneous provisions providing for appropriate distribution and treatment of accounting records concerning the accounts, tax treatment, limitation on eligible investments, qualifications of the Custodian and any successor Custodian (including minimum capital, other than borrowed capital, and surplus), waiver of custodial security interests, and rights of the Custodian.

# EXHIBIT 16

# FORM OF PROJECT TRUST AGREEMENT

[attached]

# PROJECT TRUST AGREEMENT

# BETWEEN

# INDIANA FINANCE AUTHORITY

# AND

U.S. BANK NATIONAL ASSOCIATION, As Trustee

> Indiana Finance Authority East End Crossing of the Ohio River Bridges Project

# TABLE OF CONTENTS

		Page
ARTICLE L	DEFINITIONS	3
ARTICLE II.	FUNDS, CREATION AND DEPOSITS	9
Section 2.01. Section 2.02. Section 2.03. Section 2.04. Section 2.05. Section 2.06. Section 2.07. Section 2.08. Section 2.09. Section 2.10. Section 2.11. Section 2.13. Section 2.14. Section 2.15. Section 2.16.	Establishment of Funds Toll Revenue Fund AP Appropriations Fund MP Appropriations Fund Toll System Collection Expense Fund IFA First Priority Costs Fund AP Payment Fund AP Relief Event and Termination Compensation Fund AP Disputed Amounts Fund MP Payment Fund MP Payment Fund MP Relief Event and Termination Compensation Fund IFA Appropriations Fund Other IFA Costs Fund Relief Events Allowance Account Appropriations Fund General Reserve Fund	91010111111111212
Section 2.17. ARTICLE III.	Post Termination Fund TOLL REVENUE FUND; DISBURSEMENTS	
Section 3.01. Section 3.02. Section 3.03.	Deposits Disbursements Investments	14
ARTICLE IV.	AP APPROPRIATIONS FUND; DISBURSEMENTS	16
Section 4.01. Section 4.02. Section 4.03.	Deposits	16
ARTICLE V.	MP APPROPRIATIONS FUND; DISBURSEMENTS	18
Section 5.01, Section 5.02, Section 5.03,	Deposits	18
ARTICLE VI.	IFA APPROPRIATIONS FUND AND RELIEF EVENT ALLOWAND ACCOUNT APPROPRIATIONS FUND	
Section 6.01. Section 6.02. Section 6.03. Section 6.04.	Deposits to IFA Appropriations Fund	20
Section 6.05.	Investments	20

ARTICLE VII.	OTHER FUNDS; DISBURSEMENTS; INVESTMENTS	21
Section 7.01.	Toll System Collection Expense Fund	21
Section 7.02.	IFA First Priority Costs Fund	
Section 7.03.	AP Payment Fund	21
Section 7.04.	MP Payment Fund	
Section 7.05.	Other IFA Costs Fund	
Section 7.06. Section 7.07.	AP Disputed Amounts Fund	
Section 7.08.	AP Relief Event and Termination Compensation Fund	
Section 7.09.	MP Disputed Amounts Fund	
Section 7.10.	IFA Appropriations Fund	
Section 7.11.	General Reserve Fund	
Section 7.12.	Relief Events Allowance Account Appropriations Fund	
Section 7,13.	Post Termination Fund	
Section 7.14.	Investments	22
ARTICLE VIII.	TRUSTEE COVENANTS	23
Section 8.01.	Accounting Records and Statements	23
Section 8.02.	Report of Certain Available Funds	23
ARTICLE IX.	DEFAULTS AND LIMITATIONS OF LIABILITY; NO DEBT	24
Section 9.01.	Events of Default.	24
Section 9.02.	Remedies	24
Section 9.03.	Non-Waiver	
Section 9.04.	Remedies Not Exclusive	
Section 9.05.	No Liability by the Trustee	
Section 9.06.	No Debt	
ARTICLE X.	TRUSTEE	26
Section 10.01.	Duties, Removal and Resignation	
Section 10.02.	Compensation of the Trustee; Indemnity	
Section 10.03.	Protection to the Trustee	
Section 10.04.	Merger or Consolidation	
Section 10.05. Section 10.06.	Waiver of Trustee Lien; Waiver of Trustee Set-off	
	Security Interest	
ARTICLE XI.	AMENDMENTS OR SUPPLEMENTS TO PROJECT TRUST AGREEMENT; OTHER AGREEMENTS	30
Section 11.01.	Amendment or Supplement by Consent	30
Section 11.02.	Amendment or Supplement to Other Agreements	
Section 11.03,	Notice of Amendment	
ARTICLE XII.	MISCELLANEOUS	32
Section 12.01.	Benefits of Project Trust Agreement	32
Section 12.02.	Successor Deemed Included in all References to Predecessor	32
Section 12.03.	Content of Certificates	
Section 12.04.	Notices	32

Section 12.	95. Tax	x Reporting	33
Section 12.		estments	
Section 12.	07. Art	ticle and Section Headings, Gender and References	34
Section 12.		rtial Invalidity	
Section 12.	09. Ind	liana Law	34
Section 12.		ective Date	
Section 12.	H. Exe	ecution in Counterparts	32
Section 12.	12. Sur	rvival	32
EXHIBIT Á	FUND, I	SITION FORM FOR TOLL SYSTEM COLLECTION EXPENSE IFA FIRST PRIORITY COSTS FUND AND OTHER IFA COSTS	A - 1
EXHIBIT B	FUND	SITION FORM FOR AP PAYMENT FUND AND MP PAYMENT	.B - 1
EXHIBIT C	-	SITION FORM FOR AP DISPUTED AMOUNTS FUND AND AP FEVENT AND TERMINATION COMPENSATION FUND	,Č - 1
EXHIBIT D	-	SITION FORM FOR MP DISPUTED AMOUNTS FUND AND MP EVENT AND TERMINATION COMPENSATION FUND	D - 1

### PROJECT TRUST AGREEMENT

This PROJECT TRUST AGREEMENT, dated as of the Effective Date of the PPA (as those terms are hereinafter defined), is entered into between the INDIANA FINANCE AUTHORITY, a body corporate and politic, not a state agency but an instrumentality exercising essential public functions, of the State of Indiana ("IFA") and U.S. Bank National Association, a national banking association, duly organized and existing under and by virtue of the laws of the United States of America (the "Trustee") and witnesseth as follows:

#### RECITALS

WHEREAS, IFA and WVB East End Partners, LLC (the "Developer") have entered into that certain Public Private Agreement dated December 27, 2012, as it may be amended from time to time in accordance with its terms, with an "Effective Date" as set forth therein (the "PPA") for the purpose of facilitating the design, financing, construction and, to the extent described in the PPA, the operation and maintenance of the East End Crossing of the Ohio River Bridges Project, as those terms are defined below;

WHEREAS, this Project Trust Agreement is being executed by the parties hereto in order to provide for the establishment of the various Funds hereinafter described, the deposit to the Funds of various moneys which may be remitted to the Trustee in respect to the East End Crossing, and the administration, investment, and distribution of moneys in the various Funds as provided herein;

WHEREAS, under the PPA, the Developer is obligated to design, finance, build and, to the extent described therein, operate and maintain the East End Crossing so that it is available for use of IFA, and IFA is obligated to make certain periodic payments to Developer in the form of Milestone Payments and Availability Payments, as those terms are hereinafter defined, together with Termination Compensation and Compensation Amounts, as those terms are hereinafter defined, and is further obligated to pay certain ongoing costs and expenses of the East End Crossing as are more fully described herein;

WHEREAS, IFA has executed a Memorandum of Understanding with INDOT, as hereinafter defined, with respect to the East End Crossing, further delineating the relationship and relative responsibilities of IFA and INDOT with respect to the East End Crossing;

WHEREAS, IFA has entered into a Milestone Payment Agreement with INDOT pursuant to which INDOT will periodically contribute moneys to IFA for the purpose of defraying the costs of the East End Crossing in order to reduce the amount of Availability Payments required to be paid to the Developer, which moneys will be used to make Milestone Payments to the Developer under the PPA for the purpose of paying costs of the East End Crossing;

WHEREAS, IFA has entered into a Master Use Agreement, as hereinafter defined, with INDOT, pursuant to which INDOT will make periodic rental payments to IFA for the use of the East End Crossing after the Substantial Completion Date, as set forth in the Master Use Agreement, which moneys will be used to the extent hereinafter described, to make Availability Payments to the Developer and otherwise as provided in Article III herein:

WHEREAS, IFA is granting a security interest in the Developer Trust Estate, as defined herein, under this Project Trust Agreement.

#### **GRANTING CLAUSES**

NOW, THEREFORE, in consideration of the foregoing premises and of the mutual agreements and covenants set forth herein and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledge by both parties, and in order to secure the payments from the IFA to the Developer due and payable under the PPA, and the performance and observance of all the covenants and conditions of the IFA under the PPA, the IFA does hereby pledge unto the Trustee, for the benefit of the Developer, and grant a security interest in and lien on the moneys, investments, investment property, securities, securities entitlements, financial assets and other property held from time to time in the following Funds—

- AP Payment Fund,
- AP Relief Event and Termination Compensation Fund,
- AP Disputed Amounts Fund,
- MP Payment Fund,
- MP Relief Event and Termination Compensation Fund, and
- MP Disputed Amounts Fund:

(the "Developer Trust Estate") PROVIDED THAT, the Developer shall have no interest in or claim upon any of the other Funds, which shall be held by the Trustee for the benefit of, and as fiduciary for, the IFA. Further, the IFA and the Trustee, for themselves and their respective successors, do hereby covenant and agree (for so long as the PPA shall be in effect, subject to continuing rights and obligations set forth in Section 12.12) as follows:

#### ARTICLE L

#### DEFINITIONS

Unless the context otherwise requires, the terms defined in this Section L01 shall for all purposes hereof and of any amendment hereof or supplement hereto and of any certificate, opinion, request or other document mentioned herein or therein have the meanings defined herein, the following definitions to be equally applicable to both the singular and plural forms of any of the terms defined herein. All capitalized terms used herein but not defined herein shall have the respective meanings ascribed thereto in the PPA.

- "AP Appropriations Fund" means the fund described in Section 2.03 hereof.
- "AP Disputed Amounts Fund" means the fund described in Section 2.09 hereof.
- "AP Payment Fund" means the fund described in Section 2.07 hereof.
- "AP Relief Event and Termination Compensation Fund" means the fund described in Section 2.08 hereof.
- "Authorized Representative of the IFA" means the Public Finance Director of the State of Indiana and those persons designated in writing by the Public Finance Director from time to time to the Trustee.
- "Availability Payments" means the payments by that name to be made by the IFA to the Developer under the PPA.
  - "Business Day" has the meaning specified in the PPA.
- "Certificate of Developer" means an instrument in writing signed by an officer of Developer duly authorized by the governing body of Developer for that purpose.
- "Certificate of IFA" means an instrument in writing signed by the Chairman of IFA or the Public Finance Director or such other officer, member or director of IFA that duly authorized by a resolution of IFA or State law for that purpose from time to time.
- "Compensation Amount" means an amount, if any, owed by IFA to the Developer under Article 15 of the PPA on occurrence of a Relief Event (as used therein), and payable from either the MP Relief Event and Termination Compensation Fund or the AP Relief Event and Termination Compensation Fund hereunder.
- "Custodian" means the bank or trust company serving as Custodian under the Custody Agreement.
- "Custody Agreement" means the agreement to be entered between and among IFA, KPTIA, the Tolling Body, if appropriate, the Toll Operator and the Custodian as described in Subsection 11.7.1 of the Development Agreement.

"Department Milestone Payments" shall have the meaning set forth in the Milestone Payment Agreement.

"Department Relief Events Reserve Payments" shall have the meaning set forth in the Milestone Payment Agreement.

"Developer" means the private entity selected by IFA to develop the East End Crossing as described in Subsection 10.3.2 of the Development Agreement.

"Developer Trust Estate" means has the meaning set forth in the Granting Clauses hereto.

"Development Agreement" means the Bi-State Development Agreement among KPTIA, KYTC, IFA, INDOT and the Louisville and Southern Indiana Bridges Authority pursuant to which the Ohio River Bridges Project will be jointly undertaken by the State of Indiana and the Commonwealth of Kentucky.

"Disputed Amounts" means any amounts in dispute as described in Section 10.3 of the PPA.

"Downtown Crossing" means a tolled bridge facility involving reconstruction and operational improvements to the Kennedy Interchange where I 64, I 65 and I 71 converge on the south side of the Kennedy Bridge in downtown Louisville (Section 1), renovation of the Kennedy Bridge along with construction of a new Downtown Bridge just east of the Kennedy Bridge (I 65) (Section 2), and reconstruction of the I 65 approach in Indiana, including modernization to improve ingress and egress, realignment and widening of the approaches (Section 3), all as more fully described in the Development Agreement.

"East End Crossing" means a tolled bridge facility involving construction of a new East End Bridge (Section 5) located about eight miles from downtown Louisville connecting the Gene Snyder Freeway (KY 841) to the Lee Hamilton Highway (Section 6), all as more fully described in the Development Agreement.

"Effective Date" has the meaning specified in the PPA.

"Eligible Investments" means any one or more of the following investments, if and to the extent the same are then legal investments under the applicable laws of the State for moneys proposed to be invested therein:

- (i) obligations fully and unconditionally guaranteed as to timely payment of principal and interest by any agency or instrumentality of the United States of American when such obligations are backed by the full faith and credit of the United States of America:
  - (ii) Federal Housing Administration debentures;
- (iii) Federal Home Loan Mortgage Corporation participation certificates and senior debt obligations (excluded are stripped mortgage securities that are purchased at prices exceeding their principal amounts);

- (iv) Farm Credit Bank consolidated system-wide banks and notes:
- (v) Federal Home Loan Banks consolidated debt obligations;
- (vi) Federal National Mortgage Association senior debt obligations and mortgage-backed securities (excluded are stripped mortgage securities that are purchased at prices exceeding their principal amounts);
- (vii) unsecured certificates of deposit, time deposits and bankers' acceptances of any bank the short-term obligations of which are rated "A-I" or better by S&P having an original maturity of not more than 360 days;
- (viii) commercial paper (having original maturities of not more than 270 days) rated "A-I" by S&P and "Prime-I" by Moody's;
- (ix) evidence of ownership of proportionate interests in future interest and principal payments on obligations described above held by a bank or trust company as custodian, under which the owner of the investment is the real party in interest and has the right to proceed directly and individually against the obligor and the underlying government obligations are not available to any person claiming through the custodian or to whom the custodian may be obligated;
- (x) deposits the aggregate amount of which are fully insured by the Federal Deposit Insurance Corporation, in banks which have capital and surplus of at least \$5 million; and
- (xi) money market funds rated "Aam" or "Aam-G" by S&P, which funds may be funds of the Trustee or its affiliates.

"Event of Default" has the meaning set forth in Section 8.01 hereof.

"Financial Close" has the meaning specified in the PPA.

"First Priority Costs" means the following costs payable from the IFA First Priority Costs Fund:

- (a) The fees and costs of the Custodian properly incurred under, and in accordance with, the Custody Agreement; and
- (b) The fees and costs of the Trustee properly incurred under, and in accordance with, the Project Trust Agreement.

"Fund" means any of the funds created in Section 2.01 hereof.

"General Reserve Fund" means the fund described in Section 2.06 hereof.

"IFA" means the Indiana Finance Authority; a body politic and corporate created by Indiana pursuant to IC 4-4-14-4, which provides that the exercise of its powers constitutes an essential governmental, public, and corporate function; the procuring entity for East End Crossing.

"IFA Costs" means for any month or any Fiscal Year, as applicable, fees, costs and expenses of all kinds incurred by IFA relating to the East End Crossing after the Effective Date, including:

- (a) salaries, wages and benefits of employees, rent, office costs, advisor and consultant costs, including costs of traffic and revenue studies and updates thereto, and attorneys' fees;
- (b) costs to acquire property, easements, rights of entry, rights of access and other interests necessary for construction, operation or maintenance of the East End Crossing; and
- (c) all other organizational, administrative, operating and overhead fees, costs and expenses of IFA;

provided that "IFA Costs" excludes IFA's Recoverable Costs, and other amounts due from Developer under the Agreement.

"IFA First Priority Costs Fund" means the fund described in Section 2.06 hereof.

"INDOT" or "Department" means Indiana Department of Transportation, an agency of Indiana.

"Indiana Revenue Share" means 50% of all Toll Revenues, subject to any adjustment described in Subsection 8.1.9 of the Development Agreement.

"Indiana UCC" means the Uniform Commercial Code in effect from time to time in the State of Indiana.

"Interlocal Agreement(s)" means any agreement or agreements to be entered by and between the IFA, INDOT, KPTIA and KYTC (or any of them representing each state) for the joint undertaking of facilitating the accomplishment of the Ohio River Bridges Project, under the interlocal governing statutes of each state.

"KPTIA" means Kentucky Public Transportation Infrastructure Authority, the developing authority and issuing authority for the Downtown Crossing.

"KYTC" means Kentucky Transportation Cabinet, the procuring agency on the Downtown Crossing.

"MP Appropriations Fund" means the fund described in Section 2.04 hereof.

"MP Disputed Amounts Fund" means the fund described in Section 2.15 hereof.

"MP Payment Fund" means the fund described in Section 2.13 hereof.

"MP Relief Event and Termination Compensation Fund" means the fund described in Section 2.14 hereof.

"Master Use Agreement" means the agreement by that name regarding the East End Crossing between IFA and INDOT and the supplements or amendments thereto.

"Milestone Payment Agreement" means the agreement by that name dated as of the Effective Date regarding the East End Crossing between IFA and INDOT and the supplements or amendments thereto.

"Milestone Payments" means payments by that name due from the IFA to the Developer under the PPA.

"Monthly Disbursement" means the amount, if any, paid by IFA to Developer in accordance with Section 10.2.3 of the PPA, and equal to (a) 95% of the MAP (for the subject year) divided by 12 minus (b) the interest owed by Developer to IFA, if any, under the PPA.

"Ohio River Bridges Project" means the Downtown Crossing and East End Crossing.

"Other IFA Costs Fund" means the fund by that name described in Section 2.10 hereof.

"PPA" or "Public Private Agreement" means the agreement or agreements to be entered between IFA and Developer for development of the East End Crossing.

"Post Termination Fund" means the fund by that name described in Section 2.12 hereof.

"Project Trust Agreement" means this Project Trust Agreement as amended and supplemented from time to time.

"Quarterly Payment" means the amount of the portion of Availability Payment payable by IFA to Developer for a given calendar quarter, calculated as provided in Exhibit 10 (Payment Mechanism) to the PPA.

"Refief Event" has the meaning set forth in the PPA.

"Relief Events Allowance Account Appropriations Fund" means the fund described in Section 2.15 hereof.

"Requisition" means a request for disbursement funds from a Fund in the forms attached to this agreement as Exhibits A through E.

"Substantial Completion Date" means the date that Substantial Completion has been achieved for the East End Crossing as defined in the PPA.

"Termination Compensation" means each measure of compensation, if any, owing from IFA to Developer upon termination of the PPA prior to the stated expiration date of the Term as set forth in the PPA.

"Toll Operations Agreement" means an agreement to be entered into among a Toll Operator and either (i) the States' Parties (or certain of them representing each State) or (ii) the Tolling Body, which will identify the duties and responsibilities of the Toll Operator with respect to the comprehensive electronic tolling system and the deposit of Toll Revenues pursuant to the

Custody Agreement. The initial Toll Operations Agreement may be contained within the Toll System Integrator Agreement.

"Toll Revenue Fund" means the fund by that name described in Section 2.01 hereof.

"Toll Revenues" means all revenues actually received by the Custodian in connection with the Project or the tolling thereof, including:

- (a) Gross user fees and tolling toll revenues;
- (b) Administrative fees;
- (c) Violation charges;
- (d) Other revenues from the Project or the Users thereof the disposition of which is not specifically addressed by an agreement regarding Business Opportunities:
- (e) Proceeds of business interruption or other insurance against loss of revenues from operation of the Project:
- (f) Payments from any Governmental Entity in replacement of or substitution for toll revenues;
- (g) Amounts received pursuant to any collection or enforcement action, judgment or settlement with respect to any of the foregoing revenues;
- (h) Amounts received as liquidated or other damages under contracts to which IFA is a party with respect to any of the foregoing revenues; and
  - (i) Interest earned on any of the foregoing amounts.

Toll Revenues exclude insurance proceeds, judgments and awards, to the extent they do not replace, reimburse, compensate or substitute for any of the foregoing revenues.

"Toll System Collection Expense Fund" means the fund by that name described in Section 2.05 hereof.

"Toll System Collection Expenses" means amounts payable by IFA to the Toll Operator for the Indiana portion of tolling operations and maintenance expenses under the Toll Operations Agreement.

"Trustee" means U.S. Bank National Association, as Project Trustee under this Project Trust Agreement, its successors and assigns.

"Use Payment" shall have the meaning set forth in the Master Use Agreement.

(End of Article I)

#### ARTICLE IL

### FUNDS, CREATION AND DEPOSITS

### Section 2.01. Establishment of Funds.

- (a) There is hereby created and the Trustee hereby establishes the following funds under this Project Trust Agreement, to be known collectively as the Funds and individually as a Fund:
  - 1. Toll Revenue Fund
  - 2. AP Appropriations Fund
  - 3. MP Appropriations Fund
  - 4. Toll System Collection Expense Fund
  - 5. IFA First Priority Costs Fund
  - 6. AP Payment Fund
  - 7. AP Relief Event and Termination Compensation Fund
  - 8. AP Disputed Amounts Fund
  - 9. MP Payment Fund
  - 10. MP Relief Event and Termination Compensation Fund
  - 11. MP Disputed Amounts Fund
  - 12. IFA Appropriations Fund
  - 13. Other IFA Costs Fund
  - 14. Relief Event Allowance Account Appropriations Fund
  - 15. General Reserve Fund
  - 16. Post Termination Fund
- (b) The Trustee covenants and agrees that all moneys, when and as received by Trustee and designated or otherwise directed for deposit into any of the Funds, whether pursuant to a transfer from IFA, the Developer, the Custodian or any other Person, will be received and held by the Trustee in trust hereunder and will be deposited by the Trustee into the appropriate Fund and held in trust in such Fund.
- (c) All moneys delivered to the Trustee for deposit into any of the Funds shall be (i) deposited into the appropriate Fund as provided further in this Article II, (ii) held by the Trustee in trust for the benefit of either the Developer or IFA or both, as more fully designated for each Fund hereinafter in accordance with the terms of this Project Trust Agreement, (ii) disbursed, allocated and applied by the Trustee solely to the uses and purposes set forth herein, and (iv) accounted for separately and apart from all other moneys, funds, accounts or other resources of the Trustee.
- (d) Trustee shall have no beneficial interest in any of the Funds, but is serving as fiduciary and trust holder for the same for the benefit of Developer and IFA, as their respective interests may appear.

### Section 2.02. Toll Revenue Fund.

- (a) The IFA shall execute and deliver the Custody Agreement and cause the Custodian thereunder to collect Toll Revenues, and to transfer the Indiana Revenue Share to the Trustee in accordance with the terms thereof.
- (b) The Trustee shall immediately deposit the Indiana Revenue Share, as received from the Custodian, the IFA or any other Person, into the Toll Revenue Fund.
- (c) The Trustee shall administer the Toll Revenue Fund as provided in Article III hereof.

### Section 2.03. AP Appropriations Fund.

- (a) The IFA and INDOT have executed and delivered the Master Use Agreement, which requires INDOT to seek appropriations for and make Use Payments to IFA, and shall execute and deliver biennial supplements thereto from time to time pursuant to its terms.
- (b) The IFA shall immediately transfer all Use Payments to the Trustee (or cause INDOT to transfer such payments directly to the Trustee). In the event the IFA receives appropriations in lieu of any deficiencies in Use Payments made by INDOT (in whole or in part) it will immediately transfer such amounts to the Trustee. The Trustee shall immediately deposit all such moneys in the AP Appropriations Fund.
- (c) The Trustee shall administer the AP Appropriations Fund in the manner set forth in Article IV hereof.

### Section 2.04, MP Appropriations Fund.

- (a) The IFA and INDOT have executed and delivered the Milestone Payment Agreement, which requires INDOT to seek appropriations for and make Department Milestone Payments to IFA, and shall execute and deliver any biennial supplements thereto, pursuant to its terms.
- (b) The IFA shall immediately transfer such Department Milestone Payments to the Trustee (or cause INDOT to transfer such payments directly to the Trustee). In the event the IFA receives appropriations in lieu of any deficiencies in Department Milestone Payments made by INDOT (in whole or in part) it will immediately transfer such amounts to the Trustee. The Trustee shall immediately deposit all such moneys in the MP Appropriations Fund.
- (c) The Trustee shall administer the MP Appropriations Fund in the manner set forth in Article V hereof.

### Section 2.05. Toll System Collection Expense Fund.

(a) Moneys shall be deposited in the Toll System Collection Expense Fund as provided in Section 3.02(a) and Section 4.02(a) hereof.

(b) Moneys in the Toll System Collection Expense Fund shall be expended to pay Toll System Collection Expenses as provided in Section 7.01 hereof.

### Section 2.06. IFA First Priority Costs Fund.

- (a) Moneys shall be deposited in the IFA First Priority Costs Fund as provided in Section 3.02(b) and Section 4.02(b) hereof.
- (b) Moneys in the IFA First Priority Costs Fund shall be used to pay the IFA First Priority Costs at the times and in the manner prescribed in Section 7.02 hereof.

# Section 2.07. AP Payment Fund.

- (a) Moneys shall be deposited in the AP Payment Fund as provided in Section 3.02(c) and Section 4.02(c) hereof.
- (b) Moneys in the AP Payment Fund shall be used to pay the Availability Payments to the Developer at the times and in the manner prescribed in Section 7.03 hereof.

# Section 2.08. AP Relief Event and Termination Compensation Fund.

- (a) Moneys shall be deposited in the AP Relief Event and Termination Compensation Fund as provided in Section 3.02(d)(ii) and Section 4.02(d)(ii) hereof.
- (b) Moneys in the AP Relief Event and Termination Compensation Fund shall be used to pay the Compensation Amounts and Termination Compensation to the Developer after Substantial Completion at the times and in the manner prescribed in Section 7.07 hereof.

# Section 2.09. AP Disputed Amounts Fund.

- (a) Moneys shall be deposited in the AP Disputed Amounts Fund as provided in Section 3.02(d)(i) and Section 4.02(d)(i) hereof.
- (b) Moneys in the AP Disputed Amounts Fund shall be used to pay Disputed Amounts after the Substantial Completion Date to the Developer at the times and in the manner prescribed in Section 7.06 hereof.

### Section 2.10. MP Payment Fund.

- (a) Moneys shall be deposited in the MP Payment Fund as provided in Section 5.02(a) hereof.
- (b) Moneys in the MP Payment Fund shall be used to pay the Milestone Payments to the Developer at the times and in the manner prescribed in Section 7.04 hereof.

# Section 2.11. MP Relief Event and Termination Compensation Fund.

(a) Moneys shall be deposited in the MP Relief Event and Termination Compensation Fund as provided in Section 5.02(b) hereof.

(b) Moneys in the MP Relief Event and Termination Compensation Fund shall be used to pay the Compensation Amounts and Termination Compensation to the Developer prior to Substantial Completion at the times and in the manner prescribed in Section 7.08 hereof.

# Section 2.12. MP Disputed Amounts Fund.

- (a) Moneys shall be deposited in the MP Disputed Amounts Fund as provided in Section 5.02(c) hereof.
- (b) Moneys in the MP Disputed Amounts Fund shall be used to pay Disputed Amounts prior to the Substantial Completion Date to the Developer at the times and in the manner prescribed in Section 7.09 hereof.

# Section 2.13. IFA Appropriations Fund.

- (a) Moneys shall be deposited in the IFA Appropriations Fund as provided in Article VII hereof.
- (b) Moneys in the IFA Appropriations Fund may be transferred to various Funds as required for the purposes described in Article VII and in Section 7.10 hereof.

### Section 2.14. Other IFA Costs Fund.

- (a) Moneys shall be deposited in the Other IFA Costs Fund as provided in Section 3.02(d) (iii) and Section 4.02(d)(iii) hereof.
- (b) Moneys in the Other IFA Costs Fund shall be used to pay other IFA Costs at the times and in the manner prescribed in Section 7.05 hereof.

# Section 2.15. Relief Events Allowance Account Appropriations Fund.

- (a) The IFA and INDOT have executed and delivered the Milestone Payment Agreement, which requires INDOT to seek appropriations for and make Department Relief Events Reserve Payments to IFA, and shall execute and deliver any biennial supplements thereto, pursuant to its terms.
- (b) The IFA shall immediately transfer such Department Relief Events Reserve Payments to the Trustee (or cause INDOT to transfer such payments directly to the Trustee). The Trustee shall immediately deposit such moneys in the Relief Events Allowance Account Appropriations Fund.
- (c) Moneys in the Relief Events Allowance Account Appropriations Fund shall be used for such purposes at such times and in the names provided in Section 7.04 hereof.

### Section 2.16. General Reserve Fund.

(a) Moneys shall be deposited in the General Reserve Fund as provided in Section 3.02(d) (iv) and Section 4.02(d)(iv) hereof.

(b) Moneys in the General Reserve Fund shall be used for such purposes, at such times and in the manner prescribed in Section 7.11 hereof.

# Section 2.17. Post Termination Fund.

- (a) Moneys shall be deposited in the Post Termination Fund as provided in Sections 3.02(d)(v), 4.02(d)(v), 5.02(b) and 6.02(g) hereof.
- (b) Moneys in the Post Termination Fund shall be used for such purposes, at such times and in the manner prescribed in Section 7.11 hereof.

(End of Article II)

#### ARTICLE III.

### TOLL REVENUE FUND: DISBURSEMENTS

- Section 3.01. Deposits. The Indiana Revenue Share shall be deposited by the Trustee into the Toll Revenue Fund as provided in Section 2.02(a).
- Section 3.02. <u>Disbursements</u>. The Trustee shall disburse moneys in the Toll Revenue Fund in the following manner, for the following purposes, in the following amounts and in the following order of priority:
  - (a) On the first Business Day of each calendar month, transfer to the Toll System Collection Expense Fund an amount sufficient to pay the Indiana Tolling System Collection Expenses allocable to the preceding month, or such lesser amount as is currently on deposit in the Toll Revenue Fund,
  - (b) On the first Business Day of each calendar month, transfer to the IFA First Priority Cost Fund an amount sufficient to pay IFA First Priority Costs allocable to the preceding month, or such lesser amount as is remaining on deposit in the Toll Revenue Fund after the transfer in (a) above.
  - (c) On the first Business Day of each calendar month, transfer to the AP Payment Fund the balance remaining in the Toll Revenue Fund after the transfers described in (a) and (b) above; provided, however, that such transfer shall not be in an amount greater than the next Quarterly Payment under the PPA.
  - (d) If the remaining balance in the Toll Revenue Fund to be transferred to the AP Payment Fund in (c) above is greater than the amounts required to make the next Quarterly Payment described therein, then, after making the transfers described in paragraphs (a) (c) above, any amounts in excess thereof shall be transferred, in the following order of priority as directed by the IFA:
    - (i) to the AP Disputed Amounts Fund, if amounts are required to be deposited therein under Article VI hereof,
    - (ii) to the AP Relief Event and Termination Compensation Fund, if amounts are required to be deposited therein under Article VI hereof.
      - (iii) to the Other IFA Costs Fund,
      - (iv) to the General Reserve Fund, and
      - (v) to the Post Termination Fund.
  - (e) Five Business Days prior to the Early Termination Date, the IFA, in its discretion, may direct the Trustee to transfer any or all amounts held in the Toll Revenue Fund to the AP Relief Event and Termination Compensation Fund.

Section 3.03. <u>Investments</u>. The Trustee may invest moneys on deposit in the Toll Revenue Fund as provided in Section 11.06 hereof, and earnings on such investments shall be retained in the Toll Revenue Fund.

(End of Article III)

#### ARTICLE IV.

#### AP APPROPRIATIONS FUND: DISBURSEMENTS

- <u>Section 4.01.</u> <u>Deposits.</u> The Trustee shall deposit moneys into the AP Appropriations Fund as provided in Section 2.03 hereof.
- <u>Section 4.02.</u> <u>Disbursements.</u> The Trustee shall disburse moneys in the AP Appropriations Fund in the following manner, for the following purposes, in the following amounts and in the following order of priority:
  - (a) On the first Business Day of each calendar month, transfer to the Toll System Collection Expense Fund an amount equal to any deficiency in such Fund after the transfer described in Section 3.02(a) above.
  - (b) On the first Business Day of each calendar month, transfer to the IFA First Priority Costs Fund an amount equal to any deficiency in such Fund after the transfer described in Section 3.02(b) above,
  - (c) On the first Business Day of each month, transfer to the AP Payment Fund in an amount sufficient after deposits described in 3.02(c) above to fund the current Monthly Disbursement or Quarterly Payment, as the case may be, due to the Developer under the PPA, and
  - (d) If the remaining balance in the AP Appropriations Fund to be transferred to the AP Payment Fund in (c) above is greater than the amounts required to make the current Monthly Disbursement or the next Quarterly Payment, as the case may be, described therein, then, after making the transfers described in paragraphs (a) (c) above, any amounts in excess thereof shall be transferred, in the following order of priority as directed by the IFA:
    - (i) to the AP Disputed Amounts Fund, if amounts are required to be deposited therein under Article VI hereof.
    - (ii) to the AP Relief Event and Termination Compensation Fund, if amounts are required to be deposited therein under Article VI hereof,
      - (iii) to the Other IFA Costs Fund,
      - (iv) to the General Reserve Fund, and
      - (v) to the Post Termination Fund.
  - (e) Five Business Days prior to the Early Termination Date, the IFA, in its discretion, may direct the Trustee to transfer any or all amounts held in the AP Appropriations Fund to the AP Relief Event and Termination Compensation Fund.

Section 4.03. <u>Investments</u>. The Trustee may invest moneys on deposit in the AP Appropriations Fund as provided in Section 11.06 hereof, and earnings on such investments shall be retained in the AP Appropriations Fund.

(End of Article IV)

#### ARTICLE V.

# MP APPROPRIATIONS FUND: DISBURSEMENTS

- <u>Section 5.01.</u> <u>Deposits.</u> The Trustee shall deposit moneys into the MP Appropriations Fund as provided in Section 2.04 hereof.
- <u>Section 5.02.</u> <u>Disbursements.</u> The Trustee shall disburse moneys in the MP Appropriations Fund in the following manner, for the following purposes, in the following amounts and in the following order of priority:
  - (a) Upon receipt of an invoice from IFA, the Trustee shall transfer an amount equal to the amount set forth in such invoice relating to the Milestone Payment then due and payable from the MP Appropriations Fund into the MP Payment Fund.
  - (b) Five (5) Business Days prior to the Substantial Completion Date, the IFA, in its discretion, may direct the Trustee to transfer all or a portion of the balances in the MP Appropriations Fund to the Post Termination Fund.
  - (c) On the Substantial Completion Date the Trustee shall transfer any remaining balances in the MP Appropriations Fund after the transfer described in (a) above into the MP Relief Event and Termination Compensation Fund.
  - (d) At the conclusion of the Milestone Payment Agreement and after all Milestone Payment obligations to the Developer under the PPA have been satisfied, the Trustee shall transfer any remaining balances in the MP Appropriations Fund, the MP Payment Fund and the MP Relief Event and Termination Compensation Fund to the General Reserve Fund.
  - (e) Five Business Days prior to the Early Termination Date, the IFA, in its discretion, may direct the Trustee to transfer any or all amounts held in the MP Appropriations Fund to the MP Relief Event and Termination Compensation Fund.
- Section 5.03. Investments. The Trustee may invest moneys on deposit in the MP Appropriations Fund as provided in Section 11.06 hereof, and earnings on such investments shall be retained in the MP Appropriations Fund.

(End of Article V)

#### ARTICLE VI.

# IFA APPROPRIATIONS FUND AND RELIEF EVENT ALLOWANCE ACCOUNT APPROPRIATIONS FUND

- Section 6.01. Deposits to IFA Appropriations Fund. IFA has covenanted in the PPA to seek appropriations, when necessary, from the Indiana General Assembly in amounts necessary to pay AP Disputed Amounts, Compensation Amounts and Termination Compensation. IFA shall deposit any amounts it receives for these purposes into the IFA Appropriations Fund. The IFA may, but is not obligated to, deposit other available amounts into the IFA Appropriations Fund from time to time. Compensation Amounts are also payable from the Relief Events Allowance Account as described in the PPA.
- Section 6.02. Disbursements from IFA Appropriations Fund. The Trustee shall transfer moneys in the IFA Appropriations Fund as follows upon written direction of the IFA:
  - (a) To the MP Disputed Amounts Fund, to the extent needed, after taking into account amounts on deposit therein after transfers described in Article V hereof, to pay Disputed Amounts which have accrued prior to the Substantial Completion Date;
  - (b) To the AP Disputed Amounts Fund, to the extent needed, after taking into account amounts on deposit therein after transfers described in Article IV hereof, to pay Disputed Amounts which have accrued after the Substantial Completion Date;
  - (c) To the MP Relief Event and Termination Compensation Fund, to the extent needed, after taking into account amounts on deposit therein after transfers described in Article V hereof, to pay Compensation Amounts for Relief Events occurring before the Substantial Completion Date;
  - (d) To the MP Relief Event and Termination Compensation Fund, to the extent needed, after taking into account amounts on deposit therein after transfers described in Article V hereof, to pay Termination Compensation accruing before the Substantial Completion Date:
  - (e) To the AP Relief Event and Termination Compensation Fund, to the extent needed, after taking into account amounts on deposit therein after transfers described in Articles III, IV and V hereof, to pay Compensation Amounts for Relief Events occurring after the Substantial Completion Date:
  - (f) To the AP Relief Event and Termination Compensation Fund, to the extent needed, after taking into account amounts on deposit therein after transfers described in Articles III, IV and V hereof, to pay Termination Compensation accruing after the Substantial Completion Date; and
    - (g) To the Post Termination Fund.

- Section 6.03. Deposits to Relief Events Allowance Account Appropriations Fund. The Trustee shall make deposits to the Relief Events Allowance Account Appropriations Fund as required by Section 2.04. In addition, IFA may, but is not obligated to, make deposits to the Relief Events Allowance Account Appropriations Fund from time to time.
- Section 6.04. <u>Disbursements from Relief Events Allowance Account Appropriations Fund</u>. The Trustee shall transfer moneys in the Relief Events Allowance Account Appropriations Fund for deposit in the Relief Events Allowance Account created under the PPA, upon written direction of the IFA.
- Section 6.05. Investments. The Trustee may invest moneys on deposit in the IFA Appropriations Fund and the Relief Events Allowance Account Appropriations Fund, as provided in Section 11.06 hereof, and earnings on such investments shall be retained in such Fund.

(End of Article VI)

#### ARTICLE VII.

# OTHER FUNDS: DISBURSEMENTS: INVESTMENTS

- Section 7.01. Toll System Collection Expense Fund. The Trustee shall use moneys in the Toll System Collection Expense Fund, upon requisition by IFA in substantially the form of Exhibit A hereto, to pay Toll System Collection Expenses allocable to Indiana and the Project on the dates and in the amounts required under the Toll Operations Agreement.
- Section 7.02. IFA First Priority Costs Fund. The Trustee shall use moneys in the First Priority Costs Fund, upon requisition by IFA in substantially the form of Exhibit A hereto, to pay IFA First Priority Costs.
- Section 7.03. <u>AP Payment Fund</u>. The Trustee shall use moneys in the AP Payment Fund, upon requisition by IFA in substantially the form of <u>Exhibit B</u> hereto, to pay Availability Payments to the Developer under the PPA, including Monthly Disbursements and Quarterly Payments.
- Section 7.04. MP Payment Fund. The Trustee shall use moneys in the MP Payment Fund, upon requisition by IFA in substantially the form of Exhibit B hereto, to pay Milestone Payments to the Developer under the PPA.
- Section 7.05. Other IFA Costs Fund. The Trustee shall use moneys in the Other IFA Costs Fund, upon requisition by IFA in substantially the form of Exhibit A hereto, to pay other IFA Costs.
- <u>Section 7.06.</u> <u>AP Disputed Amounts Fund</u>. The Trustee shall use moneys in the AP Disputed Amounts Fund, upon requisition by IFA in substantially the form of <u>Exhibit C</u> hereto, to pay Disputed Amounts to the Developer under the PPA relating to dispute arising after the Substantial Completion Date.
- Section 7.07. AP Relief Event and Termination Compensation Fund. The Trustee shall use moneys in the AP Relief Event and Termination Compensation Fund, upon requisition by IFA in substantially the form of Exhibit C hereto, to pay Compensation Amounts for an AP Relief Event or Termination Compensation to the Developer under the PPA after the Substantial Completion Date.
- Section 7.08. MP Relief Event and Termination Compensation Fund. The Trustee shall use moneys in the MP Relief Event and Termination Compensation Fund, upon requisition by IFA in substantially the form of Exhibit D hereto, to pay Compensation Amounts for an MP Relief Event or a Special Relief Event or Termination Compensation to the Developer under the PPA prior to the Substantial Completion Date.
- Section 7.09. MP Disputed Amounts Fund. The Trustee shall use moneys in the MP Disputed Amounts Fund, upon requisition by IFA in substantially the form of Exhibit D hereto, to pay Disputed Amounts to the Developer under the PPA relating to dispute arising prior to the Substantial Completion Date.

- Section 7.10. IFA Appropriations Fund. The Trustee shall use moneys in the IFA Appropriations Fund, upon written direction of the IFA as provided in Article VII, to transfer moneys to any of the following Funds:
  - (a) AP Disputed Amounts Fund.
  - (b) MP Disputed Amounts Fund,
  - (c) AP Relief Event and Termination Compensation Fund, and
  - (d) MP Relief Event and Termination Compensation Fund.
- <u>Section 7.11.</u> <u>General Reserve Fund</u>. The Trustee shall use moneys in the General Reserve Fund to remedy any deficiencies in the following funds and in the following order:
  - (a) Toll System Collection Expense Fund,
  - (b) MP Payment Fund if prior to Substantial Completion Date,
  - (c) AP Payment Fund if after Substantial Completion Date,
  - (d) IFA First Priority Costs Fund,
  - (e) Other IFA Costs Fund,
  - (f) AP Relief Event and Termination Compensation Fund if after the Substantial Completion Date, and
  - (g) MP Relief Event and Termination Compensation Fund if prior to the Substantial Completion Date.
- Section 7.12. Relief Events Allowance Account Appropriations Fund. The Trustee shall use moneys in the Relief Events Allowance Account Appropriations Fund, upon written direction of the IFA as provided in Article VII, to transfer moneys to the Relief Events Allowance Account.
- Section 7.13. Post Termination Fund. The IFA may use moneys in the Post Termination Fund after the Termination of the PPA for any valid cost of the Ohio River Bridges Project, including without limitation, operation, maintenance, improvements and life cycle costs, and remaining payments due to the Developer pursuant to the PPA.
- Section 7.14. <u>Investments</u>. The Trustee shall invest moneys in each of the Funds described in this Article VI as provided in Section 11.06 hereof, and earnings from such investment shall be retained in such Fund.

(End of Article VII)

#### ARTICLE VIII.

#### TRUSTEE COVENANTS

Section 8.01. Accounting Records and Statements. The Trustee will keep proper accounting records in which complete and correct entries shall be made of all transactions made by it relating to the receipt, deposit and disbursement of funds into the Fund, and any other funds received by Trustee hereunder and such accounting records shall be available for inspection by IFA and Developer or their respective agents duly authorized in writing on any Business Day upon reasonable notice at reasonable hours and under reasonable conditions prescribed by the Trustee. Not later than the 15<sup>th</sup> day of each month commencing with the 15<sup>th</sup> day of the month following execution of this Project Trust Agreement, the Trustee will furnish to IFA and Developer a statement covering all receipts of the Trustee for deposit into the Funds and all transfers from and into the various Funds and disbursements from the various Funds for the preceding month.

Section 8.02. Report of Certain Available Funds. Not later than the fifth Business Day of each September, commencing on the first September following execution of the PPA, the Trustee shall provide a written report to IFA and Developer of the total amount, as of September 1 of that year, available in the Toll Revenue Fund, AP Appropriations Fund, MP Appropriations Fund, IFA Appropriations Fund and Relief Events Allowance Account Appropriations Fund. The report shall separately state the amount of undisbursed earnings on the funds in the AP Appropriations Fund and MP Appropriations Fund since inception and since the prior September 1.

(End of Article VIII)

#### ARTICLE IX.

# DEFAULTS AND LIMITATIONS OF LIABILITY; NO DEBT

- Section 9.01. Events of Default. Each of the following events by IFA shall constitute Events of Default for purposes of this Project Trust Agreement:
  - (a) IFA delivers a false or incorrect notice or certificate to the Trustee; or
  - (b) IFA defaults in the performance of any of the other agreements or covenants contained in this Project Trust Agreement required to be performed by it, and such default shall have continued for a period of 30 days after IFA shall have been given notice in writing of such default by IFA, Developer or the Trustee.
- Section 9.02. Remedies. The Trustee shall promptly give notice setting forth the nature of the Event of Default to the Developer. The Trustee may, or upon the request of Developer shall, file suit against the IFA for specific performance, mandatory injunction, appointment of a receiver or for the enforcement of any other legal or equitable right as the Trustee, being advised by counsel, shall determine.
- Section 9.03. Non-Waiver. A waiver of any default or breach of duty or contract by the Trustee or IFA shall not affect any subsequent default or breach of duty or contract or impair any rights or remedies on any such subsequent default or breach of duty or contract. No delay or omission by the Trustee or IFA to exercise any right or remedy accruing upon any default or breach of duty or contract shall impair any such right or shall be construed to be a waiver of any such default or breach of duty or contract or an acquiescence therein, and every right or remedy conferred upon the Trustee or IFA by law or by this article may be enforced and exercised from time to time and as often as shall be deemed expedient by the Trustee or IFA. If any action, proceeding or suit to enforce any right or to exercise any remedy is abandoned or determined adversely to the Trustee or IFA, then the Trustee, and IFA shall be restored to their former positions, rights and remedies as if such action, proceeding or suit had not been brought or taken.
- Section 9.04. Remedies Not Exclusive. No remedy herein conferred upon or reserved to the Trustee or IFA is intended to be exclusive of any other remedy, and each such remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing in law or in equity or by statute or otherwise and may be exercised without exhausting and without regard to any other remedy conferred by any law.
- Section 9.05. No Liability by the Trustee. The Trustee will have no obligation or liability to any Person with respect to the performance by IFA of any agreements and covenants required to be performed by IFA contained in the PPA or herein, other than as a result of any liability resulting from the Trustee's gross negligence or misconduct.
- Section 9.06. No Debt. THE OBLIGATIONS OF THE IFA TO MAKE PAYMENTS TO THE DEVELOPER UNDER THE PPA WHICH ARE SECURED BY THIS PROJECT TRUST AGREEMENT DO NOT CONSTITUTE DEBT OF THE IFA, INDOT OR THE STATE OF INDIANA. OR OF ANY OTHER INSTRUMENTALITY, AGENCY OR

POLITICAL SUBDIVISION THEREOF WITHIN THE MEANING OF ANY PROVISION OF THE INDIANA CONSTITUTION PROHIBITING OR LIMITING STATE INDEBTEDNESS OR OF ANY STATUTE OF THE STATE OF INDIANA.

(End of Article IX)

#### ARTICLE X.

#### TRUSTEE

# Section 10.01. Duties, Removal and Resignation.

- (a) By executing and delivering this Project Trust Agreement, the Trustee accepts the duties and obligations of the Trustee provided in this Project Trust Agreement, but only upon the terms and conditions set forth in this Project Trust Agreement.
- (b) IFA may, by 30 days prior written request and subject to giving notice thereof to Developer and receiving the consent of Developer (except during the continuance of an Event of Default by Developer) under the PPA consent not to be unreasonably withheld, remove the Trustee initially a party hereto, and any successor thereto, and in such event, or in the event the Trustee resigns, IFA shall appoint a successor Trustee, but any such successor shall be a bank or trust company in good standing doing business and having an office in Indianapolis, Indiana, having a combined capital (exclusive of borrowed capital) and surplus of at least One Hundred Million Dollars (\$100,000,000) and subject to supervision or examination by federal or state authority. If such bank or trust company publishes a report of condition at least annually, pursuant to law or to the requirements of any supervising or examining authority above referred to, then for the purposes of this Section the combined capital and surplus of such bank or trust company shall be deemed to be its combined capital and surplus as set forth in its most recent report of conditions so published.
- (c) The Trustee may at any time resign by giving written notice to IFA Custodian and Developer not less than 30 days prior to the date of resignation. Upon receiving any such notice of resignation IFA shall promptly appoint a successor Trustee by an instrument in writing; provided, however, that in the event that IFA does not appoint a successor Trustee within 30 days following receipt of such notice of resignation, the resigning Trustee may petition an appropriate court having jurisdiction to appoint a successor Trustee. Any resignation or removal of the Trustee shall not become effective until written acceptance of appointment by the successor Trustee under this Project Trust Agreement.
- (d) Any Trustee which shall resign or be removed pursuant to this Section shall be entitled to compensation due and payable in accordance with Section 10.02 and to reimbursement for all reasonable and proper expenses and advances incurred and not previously reimbursed for its activities in connection with this Project Trust Agreement and for any indemnification due pursuant to this Project Trust Agreement and not previously paid. Any Trustee which resigns or is removed, upon payment of its unpaid compensation and expenses hereunder, shall fully discharge all the right, title and interest of the retiring Trustee and the accounts and funds hereunder shall vest in said successor Trustee, and such retiring Trustee shall promptly pay over, assign and deliver to the successor Trustee any money or other property constituting part of the Fund and any other funds and accounts then held by such Trustee, and deliver any and all records, or copies thereof, in respect of the funds and accounts held hereunder which it may have.

# Section 10.02. Compensation of the Trustee; Indemnity.

- (a) In accordance with the terms of a separate agreement between IFA and Trustee, IFA shall pay from time to time as an First Priority Costs, upon receipt of a statement, to the Trustee reasonable compensation for the Trustee's services and shall reimburse the Trustee for all its reasonable advances and expenditures, including but not limited to advances to and fees and expenses of independent accountants and attorneys-at-law or other experts employed by it in the exercise and performance of its powers and duties under this Project Trust Agreement, all as set forth in such separate agreement. IFA shall promptly pay such compensation and reimbursement in accordance with the terms of the separate agreement between IFA and the Trustee.
- (b) The IFA shall indemnify, defend, protect and hold harmless the Trustee for all costs, claims, expenses and liabilities incurred by or asserted against the Trustee in the performance of its duties under this Project Trust Agreement or any related document, including any such reasonable costs, claims, expenses and liabilities incurred in the course of defending itself against any claims or actions or enforcing any remedies under this Project Trust Agreement or any related document. Any such indemnity shall not extend to any costs, claims, expenses or liabilities adjudicated to have been caused by the negligence or willful misconduct of the Trustee or the breach of the terms of this Project Trust Agreement by Trustee. The indemnification of the Trustee under this Project Trust Agreement shall extend to its directors, officers, employees and agents. The obligations of IFA under this Section shall survive the discharge of this Project Trust Agreement and the removal or resignation of the Trustee.

# Section 10.03. Protection to the Trustee.

- (a) IFA shall indemnify, defend, protect and hold harmless the Trustee and the Trustee shall incur no liability for acting upon any notice, resolution, consent, order, certificate, report or other paper or document contemplated hereunder and reasonably believed by it to be genuine and to have been signed or presented by the proper party or parties. The Trustee, in its discretion, may consult with counsel, and the opinion or advice of such counsel, shall be full and complete authorization and protection in respect of any action taken or suffered by it under this Project Trust Agreement in good faith in accordance therewith.
- (b) The Trustee, either as principal or agent, may also engage in or be interested in any financial or other transaction with IFA or Developer, and may act as depository, trustee, or agent for any committee or body of IFA or Developer or with respect to other obligations of IFA or Developer as freely as if it were not the Trustee under this Project Trust Agreement.
- (c) The recitals at the beginning of this Project Trust Agreement shall be taken and construed as made by and on the part of IFA, and not by the Trustee, and the Trustee does not assume, and shall not have, any responsibility or obligation for the correctness of such recitals. The Trustee shall not be deemed to make any representations with respect to the security afforded by this Project Trust Agreement.
- (d) The Trustee may execute any of the trusts or powers hereof and perform the duties required of it under this Project Trust Agreement by or through attorneys, agents, or

receivers, and shall be entitled to advice of counsel concerning all matters of trust and its duty under this Project Trust Agreement.

- (e) The Trustee undertakes to perform only such duties as are specifically set forth in this Project Trust Agreement.
- (f) Every provision of this Project Trust Agreement relating to the conduct or liability of the Trustee shall be subject to the provisions of this Project Trust Agreement, including without limitation, this Article.
- (g) Whenever in the administration of the duties of the Trustee under this Project Trust Agreement the Trustee shall deem it necessary or desirable that a matter be proved or established prior to taking or not taking any action, the Trustee may request a signed Certificate of IFA or Certificate of Developer as to such matter, and such Certificate shall be full protection to the Trustee for any action taken or not taken in good faith reliance thereon.
- (h) Notices to the Trustee, or funds delivered to the Trustee received by the Trustee after 12:00 p.m. (Indianapolis, Indiana time) on any Business Day shall be deemed received by the Trustee on the following Business Day.
- (i) No provision of this Project Trust Agreement shall require the Trustee to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder, or in the exercise of its rights or powers, if it shall have reasonable grounds for believing that repayment of such funds or adequate indemnity against such risk or liability is not assured to it in its sole discretion.
- Section 10.04. Merger or Consolidation. Any company into which the Trustee may be merged or converted or with which it may be consolidated or any company resulting from any merger, conversion or consolidation to which it shall be a party or any company to which the Trustee may sell or transfer all or substantially all of its corporate trust business, provided that such company shall be eligible under Section 9.01, shall be the successor to the Trustee without the execution or filing of any paper or further act, anything herein to the contrary notwithstanding.
- Section 10.05. Waiver of Trustee Lien: Waiver of Trustee Set-off. The Trustee waives any security interest, lien or right to make deductions or setoffs that it may now have or hereafter acquire in or with respect to the Funds, any financial asset credited thereto or any security entitlement in respect thereof (except as expressly set forth in the parenthetical phrase in the immediately succeeding sentence). Neither the financial assets credited to the Funds nor the security entitlements in respect thereof will be subject to deduction, set-off, banker's lien, or any other right in favor of any person.
- Section 10.06. Security Interest. (a) Perfection of Security Interests by Control. The Trustee hereby represents and warrants and covenants the following in respect of the Project Trust Accounts, and the IFA consents thereto:

- (i) <u>Role as Securities Intermediary</u>. The Trustee is acting as securities intermediary (as defined in Section 8.102 of the Indiana UCC) in connection with the Project Trust Funds.
- (ii) <u>Establishment and Maintenance of Securities Accounts.</u> Each Project Trust Fund has been, or will be when required, established in the manner contemplated by this Project Trust Agreement and will be a "securities account" as defined in Section 8.501 of the Indiana UCC.
- (iii) <u>Financial Assets</u>. Each item of property (whether investment property, financial asset, security, instrument, eash or other property) credited to any Project Trust Account shall be treated as a "financial asset" within the meaning of Sections 8.102(a)(9) and 8.103 of the Indiana UCC, and all such financial assets (except cash) credited to any such Project Trust Fund will be registered in the name of the Trustee, indorsed to the Trustee or in blank or credited to another securities account maintained in the name of the Trustee and in no case will any financial asset credited to any such Project Trust Fund be registered in the name of Developer or IFA, payable to the order of Developer or IFA, or specially endorsed to Developer or IFA unless such financial asset has been further endorsed to the Trustee or in blank.
- (iv) <u>Jurisdiction of Trustee as Securities Intermediary</u>. For purposes of Section 8.110(e) of the Indiana UCC, the jurisdiction of the Trustee, in its capacity as securities intermediary in respect of the Project Trust Funds, is the State of Indiana.
- (v) <u>Entitlement Holders</u>. The sole entitlement holder for each Project Trust Account shall be IFA, provided that in exercising any rights as entitlement holder, IFA shall be limited by the rights specifically granted to Developer hereunder, including the rights described herein of Developer to deliver Certificates of Developer.
- (vi) Entitlement Orders Generally. The Trustee shall promptly make the deposits, withdrawals, and payments contemplated to be made into or from the Project Trust Funds. For purposes of this Project Trust Agreement, the Trustee shall treat each Certificate of Developer and Certificate of IFA contemplated hereby as an entitlement order relative to the Project Trust Funds so long as such Certificate of Developer and Certificate of IFA is expressly contemplated by this Project Trust Agreement, and shall be entitled to rely on such entitlement orders in order to effect the payments to be made respectively, to IFA and Developer.
- (vii) The parties acknowledge the effectiveness and binding nature of the pledge of and lien on the Developer Trust Estate pursuant to Indiana Code 5-1-14.4.

(End of Article X)

#### ARTICLE XI.

# AMENDMENTS OR SUPPLEMENTS TO PROJECT TRUST AGREEMENT; OTHER AGREEMENTS

- Section 11.01. Amendment or Supplement by Consent. No amendment of this Project Trust Agreement shall be valid or effective (subject to Section 12.12(a)) unless signed in writing by the Trustee and IFA and consented to in writing by the Developer during the term of the PPA. Notwithstanding the foregoing, this Project Trust Agreement and the rights and obligations provided thereby may be modified or amended at any time without the consent of the Developer, but only (1) for the purpose of curing any ambiguity, or of curing, correcting or supplementing any defective provision contained in this Project Trust Agreement, or (2) in regard to questions arising under this Project Trust Agreement which the Trustee may deem necessary or desirable and not inconsistent with this Project Trust Agreement and which shall not materially adversely affect the interests of the Developer.
- Section 11.02. Amendment or Supplement to Other Agreements. The IFA may enter into an agreement or agreements supplemental to the PPA or Custody Agreement without the consent of the Developer solely for any one or more of the following purposes to the extent permitted in the PPA or Custody Agreement and not inconsistent with the terms and provisions hereof:
  - (a) To make any changes or corrections in this Agreement as to which the IFA shall have been advised by counsel that the same are verbal corrections or changes or are required for the purpose of curing or correcting any ambiguity or defective or inconsistent provision or omission or mistake or manifest error contained in this Revenue Deposit Agreement, as are necessary or desirable;
  - (b) To add covenants and agreements of the IFA for the purpose of further securing the payments to Developer under the PPA;
  - (c) To surrender any right, power or privilege reserved to or conferred upon the IFA by the terms of this Agreement;
  - (d) To confirm as further assurance any lien, pledge or charge, or the subjection to any lien, pledge or charge, created or to be created by the provisions of this Agreement;
  - (e) To grant or to confer upon the Developer any additional rights, remedies, powers, authority or security that lawfully may be granted to or conferred upon them, or to grant to or confer upon the Trustee for the benefit of the Developer any additional rights, duties, remedies, power or authority:
  - (f) To make any changes or modifications bereof or amendments, additions or deletions hereto which may be required to permit this Agreement to be qualified under the Trust Indenture Act of 1939 of the United States of America or laws analogous thereto applicable to bonds issued by governmental bodies;

- (g) To pledge additional moneys, properties or revenues to the lien of this Agreement; and
- (h) To make any other change in this Agreement which, in the judgment of IFA, does not have a material adverse effect on the Trustee or the Developer.
- Section 11.03. Notice of Amendment. The IFA shall provide to the Developer and Trustee on or prior to the effective date of such amendment or supplement, notice of the execution and delivery of any supplement or amendment to the PPA or the Custody Agreement.

(End of Article Xf)

#### ARTICLE XII.

#### **MISCELLANEOUS**

Section 12.01. Benefits of Project Trust Agreement. Nothing in this Project Trust Agreement expressed or implied is intended or shall be construed to confer upon, or to give or grant to, any person or entity, other than Developer, IFA and the Trustee, any right, remedy or claim under or by reason of this Project Trust Agreement or any covenant, condition or stipulation hereof, and all covenants, stipulations, promises and agreements in this Project Trust Agreement contained by and on behalf of Developer shall be for the sole and exclusive benefit of IFA, Developer and the Trustee. The Trustee and IFA expressly recognize the Developer as a third party beneficiary of this Project Trust Agreement.

Section 12.02. Successor Deemed Included in all References to Predecessor. Whenever IFA, the Trustee, or any officer thereof is named or referred to herein, such reference shall be deemed to include the successor to the powers, duties and functions that are presently vested in IFA, the Trustee, or such officer, and all agreements, conditions, covenants and terms required hereby to be observed or performed by or on behalf of IFA, the Trustee, or any officer thereof shall bind and inure to the benefit of the respective successors thereof whether so expressed or not.

#### Section 12.03. Content of Certificates.

- (a) Every Certificate of Developer or Certificate of IFA with respect to compliance with any agreement, condition, covenant or term contained herein shall include (i) a statement that the person or persons making or giving such Certificate have the authority to do so and have read such agreement, condition, covenant or term and the definitions herein relating thereto; (ii) a statement that, in the opinion of the signers they have made or caused to be made such examination or investigation as is necessary to enable them to express an informed opinion as to whether or not such agreement, condition, covenant or term has been complied with; and (iii) a statement as to whether, in the opinion of the signers, such agreement, condition, covenant or term has been complied with.
- (b) Any Certificate of Developer or Certificate of IFA may be based, insofar as it relates to legal matters, upon an opinion of counsel unless the person making or giving such certificate knows that the opinion of counsel with respect to the matters upon which such certificate may be based, as aforesaid, is erroneous, or in the exercise of reasonable care should have known that the same was erroneous. Any opinion of counsel may be based, insofar as it relates to factual matters or information in the possession of Developer or IFA, upon a representation by an officer or officers of Developer or IFA unless the counsel executing such opinion of counsel knows that the representation with respect to the matters or upon which his opinion may be based, as aforesaid, is erroneous, or in the exercise of reasonable care should have known that the same was erroneous.

<u>Section 12.04.</u> <u>Notices.</u> All notices, demands, requests, consents, approvals and other communications required or permitted hereunder shall be in writing and mailed via registered

Section 12.05. Tax Reporting. All items of income, gain, expense and loss recognized in the Funds or in respect of any financial assets credited thereto shall be reported to the Internal Revenue Service and all state and local taxing authorities under the name and taxpayer identification number of IFA.

# Section 12.06, Investments.

- (a) Amounts on deposit in each Fund pursuant to this Project Trust Agreement shall be invested in Eligible Investments that will, as nearly as practicable, mature on or before the dates when such money is anticipated to be needed for disbursement hereunder. Such Eligible Investments shall be made in accordance with written directions that IFA gives from time to time. The Trustee may act as principal or agent in the acquisition or disposition of any such investment. The Trustee shall not be liable or responsible for any loss suffered in connection with any such investment made by it under the terms of and in accordance with this Section 11.06. The Trustee may sell or present for prepayment any obligations so purchased whenever it shall be necessary in order to provide moneys to meet any payment of the funds so invested, and the Trustee shall not be liable or responsible for any losses resulting from any such investment sold or presented for prepayment. Interest or profit received on such investments shall be retained in the account that generated the interest or profit.
- (b) The Trustee may conclusively rely that any investment directed by IFA is an Eligible Investment as required by this Project Trust Agreement. The Trustee may act as depository, manager, advisor or sponsor with regard to any Eligible Investment.
- (c) If IFA receives brokerage confirmations of security transactions as they occur, IFA, as the case may be, will forward such confirmations to the Trustee. The Trustee will furnish Developer and IFA monthly cash transaction statements as provided herein which include detail for all investment transactions made by the Trustee hereunder.
- (d) In computing the amount in any fund or account, Eligible Investments shall be valued at market value, exclusive of accrued interest. The Trustee shall perform such valuation no more frequently than monthly.
- (e) If at any time after investment therein an Eligible Investment ceases to meet the criteria set forth in the definition of Eligible Investments and such obligation, aggregated with other non-conforming investments, exceeds ten percent (10%) of invested funds, such Eligible Investment shall be sold or liquidated.

- (f) Investment earnings on amounts held in the Funds shall be retained therein and credited toward the balances required to be deposited therein, and shall be withdrawn and distributed only as provided in this Agreement.
- (g) To the extent relevant to any Fund, IFA shall be entitled to direct the Trustee with respect to the voting of any financial assets credited to such Funds.
- Section 12.07. Article and Section Headings, Gender and References. The headings or titles of the several articles and sections hereof and the table of contents appended hereto shall be solely for convenience of reference and shall not affect the meaning, construction or effect hereof, and words of any gender shall be deemed and construed to include all genders. All references herein to "Articles," "Sections" and other subdivisions or clauses are to the corresponding articles, sections, subdivisions or clauses hereof unless expressly provided otherwise; and the words "hereby," "herein," "hereof," "hereto," "herewith," "hereunder" and other words of similar import refer to this Project Trust Agreement as a whole and not to any particular article, section, subdivision or clause hereof.
- Section 12.08. Partial Invalidity. If any one or more of the agreements, conditions, covenants or terms contained herein required to be observed or performed by or on the part of IFA, or the Trustee shall be contrary to law, then such agreement or agreements, such condition or conditions such covenant or covenants or such term or terms shall be null and void and shall be deemed separable from the remaining agreements, conditions, covenants and terms hereof.
- Section 12.09. Indiana Law. This Project Trust Agreement shall be construed and governed in accordance with the laws of the State of Indiana.
- <u>Section 12.10.</u> <u>Effective Date.</u> This Project Trust Agreement shall become effective upon its execution and delivery.
- Section 12.11. Execution in Counterparts. This Project Trust Agreement may be executed in several counterparts, each of which shall be deemed an original, and all of which shall constitute but one and the same instrument.
- Section 12.12. Survival. (a) This Project Trust Agreement and the rights of the Developer hereunder shall survive the termination of the PPA until such time as the Developer has been paid in full for all amounts due to the Developer under the PPA.
- (b) The provisions of this Project Trust Agreement dealing with the Post-Termination Fund shall survive the termination of the PPA until such time as the IFA terminates this Project Trust Agreement in its entirety by written notice to the Trustee.

(End of Article XII)

IN WITNESS WHEREOF, the parties hereto have executed this Project Trust Agreement by their officers thereunto duly authorized as of the day and year first written above.

	U.S. BANK NATIONAL ASSOCIATION, as Trustee
	By:
	Name:
	Title:
ATTEST:	
Bý:	-
Name:	<del>-</del>
Title:	

Indiana Finance Authority East End Crossing of the Ohio River Bridges Project

# INDIANA FINANCE AUTHORITY

	By:
	Adam M. Horst, Chairman
ATTEST:	
Kendra W. York, Public Finance Director of the State of Indiana	

Signature Page to the Project Trust Agreement for the Indiana Finance Authority East End Crossing of the Ohio River Bridges Project

# EXHIBIT A

# REQUISITION FORM FOR TOLL SYSTEM COLLECTION EXPENSE FUND, IFA PRIORITY COSTS FUND AND OTHER IFA COSTS FUND

System Collection Exp Trust Agreement between Trust Agreement"), as a	n form is used for requesting payment of or reimbursement for Tollenses, First Priority Costs and other IFA Costs, pursuant to the Project cen the IFA and the Trustee dated
Project Trust A	he undersigned is a duly Authorized Representative of the IFA under the greement, and is aware of the facts specified in this Requisition, and ake the requests and directions set forth herein.
	The undersigned hereby requests payment to or upon the order of the IFA the attached schedule(s) of the following amounts from the following
•	from the Toll System Collection Expense Fund for payment of Toll System Collection Expenses allocable to Indiana and the Project, all as further specified in Schedule hereto and the attachments thereto, pursuant to Sections 2.05 and 7.01 of the Project Trust Agreement. (check bax or "N/A" as applicable)
٠	§from the IFA First Priority Costs Fund for the payment of First Priority Costs as specified in Schedule hereto and the attachments thereto, pursuant to Sections 2.06 and 7.02 of the Projec Trust Agreement (check box or "N/A" as applicable)
*	\$from the Other IFA Costs Fund for the payment of the IFA Costs specified in Schedulehereto and the attachments thereto pursuant to Sections 2.14 and 7.05 of the Project Trust Agreement(check box or "N/A" as applicable)
properly due a allocable to Ind and have not be this Requisition disbursements y	The undersigned hereby certifies that the amounts requested herein are not payable from the fund or funds specified herein, represent costs iana and the Project within the meaning of the Project Trust Agreement on the subject of any prior requisitions, requests or claims. To the extension requests disbursements to the IFA, the undersigned certifies that the will reimburse the IFA for payments already made by it to third parties as attached schedules.

Dated:, 201	
	INDIANA FINANCE AUTHORITY
	By: Authorized Representative

# SCHEDULE \_\_\_ TO REQUISITION FOR PAYMENT OF CERTAIN EXPENSES

\$	payable to IFA for	reimbursement of expenses identitied in <u>Exhibit A</u> hereto.
\$	payable to	for payment of expenses identified in Exhibit B hereto.
\$	payable to	for payment of expenses identified in Exhibit B hereto.
S	payable to	for payment of expenses identified in Exhibit B hereto.
\$	payable to	for payment of expenses identified in Exhibit B hereto.

# EXHIBIT B

# REQUISITION FORM FOR AP PAYMENT FUND AND MP PAYMENT FUND

Availability Payments, pursuant to dated, 201, (the "Project Trust Agreement. All term	used for requesting payment of Milestone Payments and the Project Trust Agreement between the IFA and the Trustee Project Trust Agreement") as all such terms are defined in the s used herein shall have the meaning specified herein or in the
Project Trust Agreement.	
Project Trust Agreement,	and is a duly Authorized Representative of the IFA under the and is aware of the facts specified in this Requisition, and lests and directions set forth herein.
	aned hereby requests the following payment to the Developer pursuant to the terms of the PPA and the Project Trust
Payment attachme	from the MP Payment Fund for payment of a Milestone, all as further specified in Schedule 1 hereto and the ents thereto, pursuant to Sections 2.10 and 7.04 of the Project reement(check box or "N/A" as applicable)
Payment attachme	from the AP Payment Fund for the payment of Availability, all as further specified in Schedule 1 hereto and the ents thereto, pursuant to Sections 2.07 and 7.03 of the Project greement. (check box or "N/A" as applicable)
under the PPA for which the	gned hereby certifies that the calculation of the amounts due his Requisition is submitted, as required pursuant to Article X 'A, are attached hereto as Schedule 1.
properly due and payable Indiana and the Project wit been the subject of any Requisition requests disb	gned hereby certifies that the amounts requested herein are from the fund specified herein, represent costs allocable to hin the meaning of the Project Trust Agreement, and have not prior requisitions, requests or claims. To the extent this ursements to the IFA, the undersigned certifies that the received the IFA for payments already made by it to Developer as hedule 1.
Dated:, 201	
•••••	INDIANA FINANCE AUTHORITY
	By: Authorized Representative

# SCHEDULE 1 TO REQUISITION FOR \_\_\_\_\_PAYMENT

\$	payable to IFA	for reimburseme	ent of e	хрє	enses identif	ied i	n Exhibit_		hereto.
\$ Pavment identifie	payable to _ d in Exhibit	hereto.	·	as	Developer	for	payment	οť	

# EXHIBIT C

# REQUISITION FORM FOR AP DISPUTED AMOUNTS FUND AND AP RELIEF EVENT AND TERMINATION COMPENSATION FUND

Compensation Amou	nts or Termination Compe	equesting payment of Disputed , nsation to the Developer after the Trust Agreement between the IFA	date of
		et Trust Agreement') as all such t	
defined in the Duckert	Twist Assistant All toring	in the Agreement ) as an such the manning	CHBS are
		used herein shall have the meaning	specified
herein or in the Projec	i Trusi Agreement.		
Project Trust		uthorized Representative of the IFA facts specified in this Requisions set forth herein.	
2. the attached so		uests payment to the Developer as sp nount(s) from the following fund(s):	ecified in
	Disputed Amounts, as fu attachments thereto, purs	e AP Disputed Amounts Fund for parther specified in Schedule heret suant to Sections 2.09 and 7.06 of the(check box or "N/A" as applicab	o and the ne Project
4	Fund for the payment Schedule hereto and	Relief Event and Termination Com of Compensation Amounts as spell the attachments thereto, pursuant to ect Trust Agreement(chestical trust)	ecified in Sections
	Fund for the payment Schedule hereto and	Relief Event and Termination Com of Termination Compensation spetthe attachments thereto, pursuant to ject Trust Agreement(chec	ecified in Sections
allocable to h	and payable from the fundational and the Project within	rtifies that the amounts requested It or funds specified herein, represented the meaning of the Project Trust Apequisitions, requests or claims	ent costs

Dated:, 201	
	INDIANA FINANCE AUTHORITY
	Ву:
	Authorized Representative

# EXHIBIT D

# REQUISITION FORM FOR MP DISPUTED AMOUNTS FUND AND MP RELIEF EVENT AND TERMINATION COMPENSATION FUND.

This Requisition form is used for requesting payment of Disputed Am Compensation Amounts or Termination Compensation to the Developer prior to the d Substantial Completion pursuant to the Project Trust Agreement between the IFA at Trustee dated, 201, (the "Project Trust Agreement") as all such terr defined in the Project Trust Agreement. All terms used herein shall have the meaning specherein or in the Project Trust Agreement.	ate of nd the ns are
<ol> <li>The undersigned is a duly Authorized Representative of the IFA undersigned Trust Agreement, and is aware of the facts specified in this Requisition authorized to make the requests and directions set forth herein.</li> </ol>	
2. The undersigned hereby requests payment to the Developer as speci the attached schedule(s) of the following amount(s) from the following fund(s):	ñed in
• \$from the MP Disputed Amounts Fund for paym Disputed Amounts, as further specified in Schedule hereto a attachments thereto, pursuant to Sections 2.12 and 7.09 of the I Trust Agreement(check box or "N/A" as applicable)	nd the
• \$from the MP Relief Event and Termination Comper Fund for the payment of Compensation Amounts as specif Schedulehereto and the attachments thereto, pursuant to Se 2.11 and 7.08 of the Project Trust Agreement(check in N/A" as applicable)	ied in ctions
• \$ from the MP Relief Event and Termination Comper Fund for the payment of Termination Compensation specif Schedule hereto and the attachments thereto, pursuant to Sc 2.11 and 7.08 of the Project Trust Agreement (check in "N/A" as applicable)	ied in ctions
3. The undersigned hereby certifies that the amounts requested here properly due and payable from the fund or funds specified herein, represent allocable to Indiana and the Project within the meaning of the Project Trust Agree and have not been the subject of any prior requisitions, requests or claims	costs

Dated: 20	
	INDIANA FINANCE AUTHORITY
	Ву:
	Authorized Representative

#### EXHIBIT 17

#### EXTRA WORK COSTS AND DELAY COSTS SPECIFICATIONS

#### EXTRA WORK COSTS

At the sole discretion of IFA, Extra Work Costs shall be determined based either on (a) a negotiated lump sum, or (b) force account.

## 1.1 Negotiated Lump Sum

- 1.1.1 Lump sum Extra Work Costs shall be negotiated based on estimated costs of
  - 1.1.1.1 Labor;
  - 1,1.1.2 Material:
  - **1.1.1.3** Equipment;
  - **1.1.1.4** Third party fees and charges (e.g. permit fees, plan check fees, review fees and charges);
  - 1.1.1.5 Extra insurance costs and extra costs of bonds and letters of credit:
    - 1.1.1.6 Other direct costs, and
  - 1.1.1.7 A reasonable contingency for Developer risk associated with the lump sum pricing
- 1.1.2 Lump sum Extra Work Costs also shall include a reasonable, negotiated markup for Contractor indirect costs, overhead and profit and Developer indirect costs and overhead. The negotiated lump sum shall not include any home office overhead of Developer or its Contractors or any markup on Contractor or Developer direct or indirect costs for Developer profit. Such indirect costs shall exclude cost of funds (whether debt or equity), and Lender charges, damages and penalties, which are not allowable as Extra Work Costs.
- 1.1.3 The price of a negotiated lump sum for Extra Work Costs shall be based on the original allocations of pricing to comparable activities, materials and equipment, as indicated in Exhibit 2-I and other sources of original pricing information (such as the Original Financial Model), whenever possible. If requested by IFA, price negotiations for lump sum Extra Work Costs shall be on an Open Book Basis.
- 1.1.4 In pricing any negotiated lump sum for Extra Work Costs, Developer shall include sales or use taxes only on such portion of the Extra Work Costs that does not qualify for exemption under applicable Law.

#### 1.2 Force Account

When Extra Work Costs are determined on a force account basis, Developer will

be compensated for the direct costs of labor, materials and equipment used in performing the Extra Work, plus markup for indirect costs, overhead and profit. The direct costs of labor, materials and equipment shall be determined as set forth in <u>Sections 1.2.1</u> below ("Labor"), <u>1.2.2</u> below ("Materials"), and <u>1.2.3</u> below ("Equipment Rental"), respectively. Markup for overhead and profit shall be determined as set forth in <u>Section 1.2.4</u> below ("Costs of Delay, Indirect Costs, Overhead and Profit").

#### 1.2.1 Labor

- 1.2.1.1 Extra Work Costs shall include the cost of labor for workers used in the actual and direct performance of the Extra Work. Workers include foremen actually engaged in the performance of the Extra Work. Workers do not include East End Crossing supervisory personnel or necessary on-site clerical staff, except when the Extra Work is a Controlling Work Item and the performance of such Extra Work actually delays. Work on the Critical Path due to no fault of Developer. In such a case, compensation for East End Crossing supervisory personnel, but in no case higher than a Project Manager's position, shall only be for the pro-rata time such supervisory personnel spend on the Extra Work. In no case shall an officer or director of Developer, an Affiliate or any Contractor, nor those persons who own more than one percent of Developer, an Affiliate or any Contractor, be considered as East End Crossing supervisory personnel, direct labor or foremen hereunder.
- 1.2.1.2 For workers who are not East End Crossing supervisory personnel, the cost of labor, whether the employer is Developer, an Affiliate, or a Contractor, will be the sum of the following.

#### (a) Actual Wages

The actual wages paid shall include any employer payments to or on behalf of the workers for health and welfare, pension, vacation and similar purposes.

#### (b) Labor Surcharge

A labor surcharge, added to the actual wages as set forth in <u>Section 1.2.1.2(a)</u> above. The labor surcharge shall be as set forth in the Blue Book, which is in effect on the date upon which the Extra Work is accomplished. The labor surcharge shall constitute full compensation for all payments imposed by State and Federal laws and for all other payments made to, or on behalf of, the workers, other than actual wages as defined in <u>Section 1.2.1.2(a)</u> above and subsistence and travel allowance as specified in Section 1.2.1.2(c) below.

#### (c) Subsistence and Travel Allowance

The actual subsistence and travel allowance paid to the workers.

#### 1.2.2 Materials

#### 1.2.2.1 IFA-Furnished Materials

IFA reserves the right to furnish any materials it deems advisable, and Developer shall have no claim for costs and markup on those materials.

#### 1.2.2.2 Developer-Furnished Materials

Only materials furnished by Developer and necessarily used in the performance of the Extra Work may be included in Extra Work Costs. The cost of those materials will be the cost to the purchaser — whether the purchaser is Developer, an Affiliate, or a Contractor — from the Supplier thereof, except as the following are applicable.

# (a) Discounts

If a cash or trade discount by the actual Supplier is offered or available to the purchaser, it shall be credited to IFA notwithstanding the fact that the discount may not have been taken.

#### (b) Non-direct Purchases

If materials are procured by the purchaser by any method which is not a direct purchase from a direct billing by the actual Supplier to the purchaser, the cost of those materials shall be deemed to be the price paid to the actual Supplier as determined by IFA plus the actual costs, if any, incurred in the handling of the materials.

#### (c) Purchaser-supplied Materials

If the materials are obtained from a supply or source owned wholly or in part by the purchaser, the cost of those materials shall not exceed the price paid by the purchaser for similar materials furnished from that source on contract items or the current wholesale price for those materials delivered to the Site, whichever price is lower.

# (d) Excessive Costs

If the cost of the materials is, in the opinion of IFA, excessive, then the cost of the material shall be deemed to be the lowest current wholesale price at which the materials were available in the quantities concerned delivered to the Site, less any discounts as provided in <u>Section 1.2.2.2(a)</u> above.

# (e) Evidence of Cost

If Developer does not furnish satisfactory evidence of the cost of the materials from the actual Supplier thereof within 60 days after the date of delivery of the materials or within 15 days after the acceptance of the contract with the Supplier, whichever occurs first, IFA reserves the right to establish the cost of the materials at the lowest current wholesale prices at which the materials were available in the quantities concerned delivered to the location of the Extra Work, less any discounts as provided Section 1.2.2.2(a) above.

#### 1.2.3 Equipment Rental

# 1.2.3.1 General Equipment Rental Provisions

(a) Extra Work Costs for the use of equipment shall be

determined at the rental rates listed for that equipment in the current edition and appropriate volume of the Rental Rate Blue Book as published by EquipmentWatch®, which is in effect on the date upon which the Extra Work is accomplished, regardless of ownership and any rental or other agreement, if they may exist, for the use of that equipment entered into by Developer or any Contractor; provided that for those pieces of equipment with a rental rate of \$10.00 per hour or less as listed in the Blue Book and which are rented from a local equipment agency, other than Developer- owned or Affiliate-owned, Extra Work Costs for use of the equipment shall be determined at the hourly rate shown on the rental agency invoice or agreement for the time used on force account work as provided in Section 1.2.3.2 below ("Equipment on the Site"). If a minimum equipment rental amount is required by the local equipment rental agency. Extra Work Costs shall be determined at the actual amount charged. The \$10 figure shall be adjusted annually on July 1 of each year of the Term by the percentage increase, if any, in the CPI since the previous July 1.

- (b) If IFA concurs that it is necessary to use equipment not listed in the Blue Book, a suitable rental rate for that equipment will be established by IFA. Developer may furnish any cost data which might assist IFA in the establishment of the rental rate. If the rental rate established by IFA is \$10.00 per hour or less, the provisions above concerning rental of equipment from a local equipment agency shall apply. The \$10 figure shall be adjusted annually on July 1 of each year of the Term by the percentage increase, if any, in the CPI since the previous July 1.
- (c) The rental rates as provided above shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance and all incidentals.
- (d) The cost of labor for operators of rented equipment shall be determined as provided in <u>Section 1.2.1</u> above ("Labor").
- (e) For costs of equipment to be eligible for Extra Work Costs, the equipment shall be in good working condition and suitable for the purpose for which the equipment is to be used.
- (f) Unless otherwise specified, manufacturer's ratings and manufacturer approved modifications shall be used to classify equipment for the determination of applicable rental rates. Equipment which has no direct power unit shall be powered by a unit of at least the minimum rating recommended by the manufacturer.
- (g) Extra Work Costs exclude the costs of small tools. Individual pieces of equipment or tools not listed in the Blue Book and having a replacement value of \$500 or less, regardless of whether consumed by use, shall be considered to be small tools ineligible for Extra Work Cost compensation. The \$500 figure shall be adjusted annually on July 1 of each year of the Term by the percentage increase, if any, in the CPI since the previous July 1.
- (h) Rental time will not be allowed while equipment is inoperative due to breakdowns.

#### 1.2.3.2 Equipment on the Site

- (a) The rental time to be included in Extra Work Costs for equipment on the Site shall be the time the equipment is in operation on the Extra Work being performed, and in addition, shall include the time required to move the equipment to the location of the Extra Work and return the equipment to the original location or to another location requiring no more time than that required to return the equipment to its original location, except that moving time is not includable in Extra Work Costs if the equipment is used at the site of the Extra Work on other than the Extra Work. Loading and transporting costs will be allowed, in lieu of moving time, when the equipment is moved by means other than its own power, except that no loading and transporting costs will be allowed if the equipment is used at the site of the Extra Work on other than the Extra Work.
- (b) The following shall be used in computing the rental time of equipment on the Site.
  - (1) When hourly rates are listed, less than 30 minutes of operation shall be considered to be 0.5 hour of operation.
  - (2) When daily rates are listed, less than 4 hours of operation shall be considered to be 0.5 day of operation.

# 1.2.3.3 Equipment Not on the Site

For the use of equipment moved onto the Site from elsewhere to perform Extra Work and used exclusively for Extra Work, the force account Extra Work Costs shall be determined at the rental rates listed in the Blue Book, which is in effect on the date upon which the Extra Work is accomplished, or, at IFA's election, determined as provided in <u>Section 1.2.3.1</u> above ("General Equipment Rental Provisions") and at the cost of transporting the equipment to the location of the Extra Work and its return to its original location, all in accordance with the following provisions.

- (a) The original location of the equipment to be hauled to the location of the Extra Work shall be subject to IFA's prior approval.
- (b) The Extra Work Costs will include the costs of loading and unloading the equipment.
- (c) The cost of transporting equipment in low bed trailers shall not exceed the hourly rates charged by established haulers.
- (d) The rental period shall begin at the time the equipment is unloaded at the site of the Extra Work, shall include each day that the equipment is at the site of the Extra Work, excluding Saturdays, Sundays and Holidays unless the equipment is used to perform the Extra Work on those days, and shall terminate at the end of the day on which the use of the equipment ceases. The rental time per day allowable as Extra Work Costs will be in accordance with the following.

as follows:	(1)	Hours	includ	dable	in E	xtra	Work	Costs	shall	be	determined
Hour	s Equipn	nent		Hours	s	nclu	dable	in			

is in Operation	Extra Work Costs
0	4
0.5	4.25
1	4.5
1.5	4.75
2	5
2.5	5.25
3	5.5
3.5	5.75
4	6
4.5	6.25
5	6.5
5.5	6.75
6	7
6.5	7.25
7	7.5
7.5	7.75
8	8
Over 8	hours in operation

- (2) The hours includable in Extra Work Costs for equipment which is operated less than 8 hours due to breakdowns, shall not exceed 8 less the number of hours the equipment is inoperative due to breakdowns.
- (3) When hourly rates are listed, less than 30 minutes of operation shall be considered to be 0.5 hour of operation.
- (4) When daily rates are listed, 0.5 day will be includable in Extra Work Costs if the equipment is not used. If the equipment is used, one day is includable in Extra Work Costs.
  - 5) The minimum rental time to be paid for the entire rental

period on an hourly basis shall not be less than 8 hours or if on a daily basis shall not be less than one day.

- (e) Should Developer desire the return of the equipment to a location other than its original location, IFA will pay the cost of transportation in accordance with the above provisions, provided the payment shall not exceed the cost of moving the equipment to the Extra Work.
- (f) Costs of transporting, and loading and unloading equipment, as above provided, will not be allowed as Extra Work Costs if the equipment is used in any way in addition to or other than upon Extra Work accounted for on a force account basis.

## 1.2.3.4 Owner-Operated Equipment

When owner-operated equipment is used to perform Extra Work, the force account Extra Work Costs for the equipment and operator shall be determined as follows:

- (a) Extra Work Costs for the equipment will be determined in accordance with Section 1.2.3.1 above ("General Equipment Rental Provisions"):
- (b) Extra Work Costs for labor and subsistence or travel allowance will be determined at the rates paid by Developer to other workers operating similar equipment already on the Site or, in the absence of other workers operating similar equipment, at the rates for that labor established by collective bargaining agreements for the type of workers and location of the work, regardless of whether the owner operator is actually covered by an agreement. A labor surcharge will be added to the cost of labor described herein, in accordance with Section 1.2.1.2(b) above ("Labor Surcharge"); and
- (c) To the direct cost of equipment rental and labor, computed as provided herein, there will be added the markups for equipment rental and labor as provided in <u>Section 1.2.4.1</u> below ("Overhead and Profit").

#### 1.2.3.5 Dump Truck Rental

Dump truck rental shall conform to the provisions in <u>Section 1.2.3.1</u> above ("General Equipment Rental Provisions"). <u>Section 1.2.3.2</u> above ("Equipment on the Site") and <u>Section 1.2.3.3</u> above ("Equipment Not on the Site"), except as follows:

- (a) Force account Extra Work Costs for fully maintained and operated rental dump trucks used in the performance of Extra Work shall be determined at the same hourly rate paid by Developer for use of fully maintained and operated rental dump trucks in performing the Work;
- (b) In the absence of Work requiring dump truck rental, IFA will establish an hourly rental rate for determining the Extra Work Costs of fully maintained and operated rental dump trucks. Developer shall provide IFA with complete information on the hourly rental rates available for rental of fully maintained and operated dump trucks:

- (c) The provisions in <u>Section 1.2.1</u> above ("Labor") shall not apply to operators of rented dump trucks;
- (d) The rental rates listed for dump trucks in the Blue Book shall not apply;
- (e) To the total of the rental costs for fully maintained and operated dump trucks, including labor, there will be added a markup in accordance with Section 1.2.4 below ("Costs of Delay, Indirect Costs, Overhead and Profit"); and
- (f) The provisions in <u>Section 1.2.3.4</u> above ("Owner Operated Equipment") shall not apply to dump truck rentals.

#### 1.2.4 Costs of Delay, Indirect Costs, Overhead and Profit

## 1.2.4.1 Contractor Markups for Delay, Indirect Costs, Overhead and Profit

- (a) To the total direct costs of a Contractor's labor, materials, and equipment other than rented dump trucks, there will be added a markup of 20 percent to the Contractor's cost of labor, 12 percent to the Contractor's cost of materials; and 12 percent to the Contractor's cost of equipment. To the total of the rental costs for fully maintained and operated dump trucks, including labor, there will be added a markup of 12 percent; there will be no separate markup for labor. These markups shall constitute full compensation for all the Contractor's costs of delay, indirect costs, overhead costs and profit associated with the Extra Work, which shall be deemed to include all expense items not specifically designated as direct costs of labor in Section 1.2.1 above, materials in Section 1.2.2 above, and equipment in Section 1.2.3 above. Such expense items include third party fees and charges (e.g. permit fees, plan check fees, review fees and charges, extra insurance costs, and extra costs of bonds and letters of credit). Such expense items exclude cost of funds (whether debt or equity), and Lender charges, damages and penalties, which are not allowable as Extra Work Costs.
- (b) IFA will not pay any markup for the Lead Contractor or any other Prime Contractor where it subcontracts labor, materials or equipment for Extra Work to a Contractor at a tier lower than the Lead Contractor or other prime Contractor. However, payment to the Lead Contractor or other prime Contractor for a markup on such subcontracted Extra Work may be obtained from Developer (see Section 1.2.4.2(a) below).

## 1.2.4.2 Developer Markups for Delay, Indirect Costs and Overhead

- (a) IFA will pay Developer, for distribution as Developer deems appropriate, a 5 percent markup on the total direct costs of labor, materials, and equipment for the Extra Work performed by a Contractor at any tier (but before any Contractor markups thereon).
- (b) There will be added a markup of 20 percent to the total direct cost of Developer's own labor; 12 percent to the total direct cost of Developer's own materials; and 12 percent to the total direct cost of Developer's own rental of equipment.

To the total of the rental costs paid directly by Developer for fully maintained and operated dump trucks, including labor, there will be added a markup of 12 percent; there will be no separate markup for labor.

- (c) These markups shall constitute the full compensation for all Developer's costs of delay, indirect costs and overhead costs associated with the Extra Work, which shall be deemed to include all expense items not specifically designated as directs costs of labor in Section 1.2.1 above, materials in Section 1.2.2 above, and equipment in Section 1.2.3 above. Such expense items include third party fees and charges (e.g. permit fees, plan check fees, review fees and charges, extra insurance costs, and extra costs of bonds and letters of credit). Such expense items exclude cost of funds (whether debt or equity), and Lender charges, damages and penalties, which are not allowable as Extra Work Costs.
- (d) There shall be paid no markup on the total or any portion of the direct or indirect costs of Developer or its Contractors for Developer profit.

#### 1.2.4.3 No Charge or Markup for Home Office Overhead

There shall be no home office overhead added for Developer or any of its Contractors

#### 1.2.5 Affiliate Extra Work Costs

- **1.2.5.1** The direct costs of an Affiliate's labor, materials, and equipment used in performing Extra Work shall be limited in accordance with <u>Section 7.6.1</u> of the Agreement.
- 1.2.5.2 If an employee or worker of an Affiliate engages in work or tasks that duplicate or repeat work or tasks being performed by an employee or worker of Developer, then none of the Affiliate's labor costs respecting the duplicated or repeated work or tasks shall be allowed as Extra Work Costs.

#### 1.2.6 Subcontractor Extra Work Costs

There will be added a markup of 5 percent to the total direct cost of each subcontractor.

#### 2. DELAY COSTS

Delay Costs shall be determined as follows:

#### 2.1 Direct Cost of Idle Labor

Compensation for the direct cost of the actual idle time of labor will be determined in the same manner as provided in <u>Section 1.2.1</u> above ("Labor").

#### 2.2 Direct Cost of Idle Equipment

Compensation for the direct cost of the actual idle time of equipment will be determined in the same manner as determinations are made for force account Extra Work

Costs for equipment used in the performance of Extra Work, as provided in <u>Section 1.2.3</u> above ("Equipment Rental"), with the following exceptions:

- 2.2.1 If the Delay Cost is attributable to the Relief Event set forth in <u>clause (i)</u> of the definition of Relief Event (IFA's lack of good and sufficient title to or right to enter and occupy any parcel in the Project Right of Way), then the right of way delay factor for each classification of equipment shown in the Blue Book will be applied to that equipment rental rate;
- 2.2.2 The Delay Costs will be determined for the actual normal working time during which the Delay condition exists, but in no case will exceed 8 hours in any one day; and
- 2.2.3 The Delay Costs will be determined for the calendar days, excluding Saturdays, Sundays and Holidays, during the existence of the Delay, except that when Extra Work Costs for rental of equipment are accruing under the provisions in <u>Section 1.2.3.3</u> above ("Equipment Not on the Site"), Delay Costs shall not include equipment rental costs for equipment not located on the Site.
- 2.2.4 If IFA determines that idle equipment should not remain on the Site during a delay, then IFA will pay the actual, reasonable costs, without markup, to (a) demobilize the equipment during the delay period and (b) remobilize the equipment at the end of the delay period. Compensation for idle equipment will not be paid while the subject equipment is demobilized from the Site during a delay period.

#### 2.3. Where Delay is to Controlling Work Item

In the case of a Relief Event Delay, Delay Costs shall include the following percentage markups, which shall constitute full compensation for all indirect delay costs (including delay overhead costs), delay expenses and delay profit related to such Relief Event Delay:

- **2.3.1** The percentage markups for the direct costs of a Contractor's labor and equipment set forth in Section 1.2.4.1(a) above ("Contract Markups for Delay. Indirect Costs, Overhead and Profit") as applied to the Contractor's costs of idle time of labor and equipment as determined under Sections 2.1 above ("Direct Costs of Idle Labor") and 2.2 above ("Direct Costs of Idle Equipment"); and
- 2.3.2 The percentage markups for the direct costs of Developer's labor and equipment set forth in <u>Section 1.2.4.2(b)</u> above (" Contract Markups for Delay, Indirect Costs, Overhead and Profit") as applied to Developer's costs of idle time of labor and equipment as determined under <u>Sections 2.1</u> above ("Direct Costs of Idle Labor") and <u>2.2</u> above ("Direct Costs of Idle Equipment"). There shall be no added markup to Developer's or any Contractor's cost of idle time of labor and equipment for Developer profit.
- 2.3.3 Such markups exclude cost of funds (whether debt or equity), and Lender charges, damages and penalties, which are not allowable as Delay Costs. For avoidance of doubt, such exclusion does not affect Developer's right to receive compensation for a Relief Event Delay that extends the date of Substantial Completion as provided in Section 15.3 of the PPA.

#### 2.4 Where Delay is to Non-Controlling Work Item

If the Delay is to a non-Controlling Work Item, then no indirect costs and expenses, and no profit, of Developer or any Contractor are allowable as Delay Costs.

## 2.5 Home Office Idled Labor and Equipment

There shall be no home office costs of idled labor or idled equipment added for Developer or any of its Contractors.

# 2.6 Delay Costs in respect of the Extension of the Date for Financial Close by IFA

If the Delay is due to IFA giving Notice to Developer of the extension of the date for Financial Close as provided in <u>Section 13.7.2</u>, Developer shall be entitled to receive the cost of extending the Financial Close Security for the period from the original date of Financial Close as set forth in the Developer FC Notice as provided in <u>Section 13.7.2</u> to the new date for Financial Close. Such payment shall be due and payable with 45 days of an invoice therefor from Developer. Developer shall also be entitled to receive payment of the compensation for certain escalation costs and the costs related to achieving Financial Close and certain breakage fees as provided in <u>Section 13.7.2.3</u>.

# 2.7 <u>Delay Costs in respect of Certain Relief Events relating to Environmental</u> Litigation

If the Delay is due to an undisputed Relief Event under <u>clause (s)</u> of the definition thereof, and in such case, arising solely out of, or solely relating to. Environmental Litigation, then notwithstanding anything to the contrary in this <u>Section 2</u>, but still subject in all respects to <u>Sections 2.4</u> and <u>2.5</u> of this <u>Exhibit 17</u>, Developer shall be entitled to receive the costs determined pursuant to <u>Sections 2.7.1</u> to <u>2.7.3</u> below for the period from the effective date of such Relief Event until the earlier of conclusion of such Relief Event or the end of the Term:

Payment for escalation costs due to an undisputed Relief Event under <u>clause (s)</u> of the definition thereof shall be limited to the escalated cost of labor, materials, and equipment on that portion of the Work which is delayed beyond an original intermediate completion date or Project Schedule Deadline and is caused to be performed during a period when the costs were higher than when such portion of the Work was planned to be performed as shown on the accepted schedule prior to the delay. Developer shall submit satisfactory documentation of escalation costs in a format approved by IFA or its designee.

- 2.7.1 Labor Escalation. Payment for escalated labor costs will be calculated as the difference in labor cost between the time the work was performed and the time the work was planned. Labor costs will be calculated in accordance with Section 1.2.1 of this Exhibit 17, except that no markup will be paid for labor escalation. Payment for escalated labor costs will be calculated as the difference in labor cost between the time the work was performed and the time the work was planned.
- 2.7.2 Materials Escalation or Storage. Payment for escalated material costs will be calculated as the difference in the material cost between the time a portion of the Work was performed and the time such portion of the Work was planned. No material escalation cost will be paid for any item covered by a separate escalation or indexing clause under the PPA Documents. IFA will pay for storage of materials due to the delay. Only the actual cost of storing the materials will be paid. No markup will be

#### paid for materials storage.

2.7.3 Equipment Escalation. Payment for eligible equipment escalation costs will be calculated as the difference between the Rental Rate Blue Book FHWA hourly rate at the time the work was performed and the Rental Rate Blue Book FHWA hourly rate at the time the work was planned. No markup will be paid for equipment escalation costs.

#### EXHIBIT 18

#### INITIAL PROJECT DEBT COMPETITION

#### 1. Overview

- 1.1. IFA seeks to ensure that the Project secures the most competitive financing terms at Financial Close, which generates an affordable MAP and provides best value gilven the Project's risk profile as established in the Agreement, PPA Documents, Principal Project Documents, detailed term sheet(s) for the Funding Agreements attached to the commitment letters from the Core Lender(s) and / or the Lead Underwriter contained in the bid submission (the "Term Sheet(s)").
- 1.2. Set out below is the process for the initial project debt competition ("Financing Competition" or "Financing Competition Protocol") in order for Developer to place the Initial Project Debt included in its Financial Plan. Developer shall undertake the Financing Competition prior to Financial Close if directed to do so by IFA as provided in Section 13.7.2 of the Agreement. The Financing Competition shall be under the control and responsibility of Developer subject to IFA's comments and review and/or approval as provided in the Financing Competition Protocol, and right to observe, monitor and audit, as set forth in the Financing Competition Protocol.
- 1.3. No changes to the Agreement, the other PPA Documents or the Principal Project Documents, including no changes in the risk allocation between IFA and Developer or between the parties to such other documents, nor any changes to Developer's risk profile with respect to the financing of the Project as documented in the Term Sheet(s), shall occur as a result of the Financing Competition, unless each of IFA and Developer give their consent to such changes each acting reasonably.

## 2. Principles of the Financing Competition

Developer shall conduct the Financing Competition according to the following principles (the "Key Principles"):

- 2.1. The Financing Competition shall be transparent and open to observation by IFA and its advisors. Developer shall conduct, at a minimum, monthly meetings with IFA and its advisors to discuss progress against Financing Competition milestones with the understanding that weekly meetings may be required as progress is made leading to Financial Close.
- Developer shall compete and evaluate both bank and capital market bond solutions.
- 2.3. Developer will be responsible for managing and controlling all operational aspects of the Financing Competition. Developer's Core Lender(s) and / or Lead Underwriter(s), as identified in Developer's proposal, shall participate in the Financing Competition, while in any case retaining any option to match terms for a specified portion of the loan or issuance as described in <u>Section 4.9</u> below.

2.4. Developer shall ensure that the process is efficient while achieving the key objective of achieving the most competitive financing terms for the Project, given the Agreement, PPA Documents, Principal Project Documents, and the Term Sheet(s), and the risk allocation contained in each of them. With respect to the delivery of financing, this could include Developer granting right-to-match lending terms to Developer's Core Lender(s) and/or secure a Lead Managing Underwriter position for the Lead Underwriter subject to the limits set out herein.

#### 3. Phase 1: Preparatory Phase

- 3.1. Developer will develop a schedule and schedule milestones including setting specific dates when review drafts of deliverables will be provided to IFA no later than 5 days after issuance of the IPDC Commencement Notice by IFA. Such schedule shall be subject to IFA's review, comment and approval (in its reasonable discretion) which shall be given within 5 business days after receipt of the draft schedule.
- 3.2. The schedule milestones shall be consistent with all completion deadlines and shall allow Developer sufficient time to reach Financial Close by the Financial Close Deadline.
- 3.3. Developer shall meet with IFA and its advisors on a monthly basis, at a minimum, to discuss the status of financing for the Project and the financing markets, in general.
- 3.4. The Preparatory Phase will conclude with finalization of the schedule and schedule milestones as provided in this Section 3.

#### 4. Phase 2: Financing Competition Phase

- 4.1. During Phase 2, Developer shall identify and solicit a wide-range of potential bank lenders and capital market underwriters/broker-dealers, and/or derivative product providers (collectively referred to as "Lenders") in order to receive the most competitive terms possible for both bank and bond financing solutions (including PABs), such terms to be consistent with the Agreement, the PPA Documents, the Principal Project Documents, and the Term Sheets. Developer will provide this list of potential Lenders to IFA for its review and comment prior to solicitation to the Lenders.
- 4.2. Developer shall request and obtain from Lenders preliminary financing terms and conditions for banks and bonds financing solutions in order to evaluate:
  - 4.2.1. the most competitive financing solution (bank versus bond solution) and
  - 4.2.2. the most competitive terms for each financing solution.
- 4.3. None of the potential Lenders shall be Affiliates of any Developer-Related Entity and IFA will provide review and, if appropriate, comments on the list of Lenders proposed by Developer. IFA shall have the right, acting reasonably, to require Developer to increase the number of potential Lenders under consideration.

- 4.4. All Lenders shall be required to execute a non-disclosure agreement in form and substance reasonably satisfactory to Developer and IFA. Any material information and clarifications about the Financing Competition that are communicated to one potential Lender shall be promptly shared with all other identified potential Lenders (except for such questions that Developer and IFA agree are commercially sensitive and confidential). Responses to potential Lender questions, comments and requests for clarifications, and any clarifications to be requested from potential Lenders, will be prepared by Developer and subject to review and comment by IFA (acting reasonably and without delay).
- 4.5. In connection with Phase 2, Developer will prepare a Preliminary Information Memorandum ("PIM") concerning the Project and the financing. The PIM will be submitted to IFA for review, comment and approval (in its reasonable discretion) prior to submittal to any Lender. IFA's response to the PIM shall be provided within 10 business days after receipt thereof for any initial submittal and 5 business days after receipt of any re-submittal.
- 4.6. Upon receipt of responses by potential Lenders, Developer shall evaluate the responses with the goal of identifying the most competitive financing terms at that point in time which generates a MAP no greater than the Annual MAP Limit and provides overall best value given the Project's risk profile as established in the Agreement. PPA Documents, Principal Project Documents, and the Term Sheet(s).
- 4.7. IFA expects the following information, at a minimum, to be evaluated for each potential Lender:
  - 4.7.1. For a bond financing solution, a par amount and indicative price proposal (as a margin from the identified Benchmark Index);
  - 4.7.2. For a bank financing solution, preliminary pricing based on either underwriting or club basis or both; and
  - 4.7.3. Commitment by the potential Lender (whether bank or bond solution) to use the identified and approved Benchmark Interest Rate Index as the market reference rate at Financial Close.
- 4.8. Developer must demonstrate to IFA's reasonable satisfaction that it has given due consideration to both bank and bond financing solutions (including PABs).
- 4.9. The Core Lender(s) and/or the Lead Underwriters may, at Developer's discretion, have the option to match the terms of up to 50% of the total Initial Project Debt that is offered and generated by the Financing Competition. The right to match is not mandatory and Developer is not obligated to offer it. Developer will provide prompt Notice to IFA as to whether the Core Lender(s) and/or the Lead Underwriters has exercised said option or declined to exercise said option.
- 4.10. Upon approval by IFA, the process will proceed to Phase 3 as described below.

- 4.11. Potential Lenders are to provide preliminary financing terms and conditions based on the Agreement, other PPA Documents, the Principal Project Documents, the Term Sheet(s) and draft legal, technical and insurance due diligence reports. If Developer believes that a change to the Agreement or the other PPA Documents may result in a material and beneficial change to financing terms (and therefore a material beneficial change to the MAP from IFA's perspective), then, Developer may also deliver to IFA a written and detailed description of the changes that would be required and an estimation of the change to the MAP. Within 10 business days after receipt of such information, IFA shall then elect, in its sole discretion, whether and to what extent to allow changes to the Agreement or the other PPA Documents.
- 4.12. The outputs and outcome of Phase 2 will be:
  - 4.12.1. A report to IFA describing the actions taken by Developer during Phase 2, qualitative and quantitative analyses of the structuring and pricing, and implications raised by the information and responses received, particularly on the MAP in each year of the Term,
  - 4.12.2. Updated Term Sheet(s), incorporating the most competitive financing terms for both bank and bond financing solutions in accordance with Section 1.3:
  - 4.12.3. A recommendation by Developer on which financing solution provides the most competitive financing terms without changes to the risk profile as described in <u>Section 2.4</u> above (other than those agreed pursuant to Section 4.12); and
  - 4.12.4. Agreement by Developer and IFA on the preferred financing approach.

These outputs and outcomes shall be submitted to IFA and shall be subject to IFA comment, review and approval (in its reasonable discretion) regarding the preferred financing approach. IFA's response to such submittals shall be provided within 10 business days after receipt thereof for any initial submittal and 5 business days after receipt of any re-submittal.

- 5. Phase 3: Final Submission Phase Bank Financing Solution
  - Developer shall finalize the financing structure for the bank financing solution 5 1. such that the financing structure has been approved by the Lender's credit committee(s) against a target price. Developer shall submit to IFA: (a) confirmation that there are no further comments on the Agreement or other PPA Documents; (b) confirmation that credit committee approval has been received and firm commitment letter(s) have been issued for a commitment period of at least 120 days or a period consistent with market practice at the time of Phase 3 of the IPDC as reasonably approved by IFA; such commitment subject only to market commitment conditions approved by Developer and IFA; and (c) the documentation referred to in Section 5.2 below (collectively referred to as the "Bank Final Submission"). The Bank Final Submission shall be submitted to IFA for review and approval (in its reasonable discretion). IFA's response to the Bank Final Submission shall be provided within 10 business days after receipt thereof for any initial submittal and 5 business days after receipt of any resubmittal.
  - 5.2. The Bank Final Submission is expected to require the following documentation:
    - 5.2.1. Substantially final legal, insurance, and technical due diligence reports:
    - 5.2.2. Firm commitment letters and executed Updated Term Sheet(s), including draft interest rate hedging or other derivative product documentation, if applicable;
    - 5.2.3. Final Contracts (and amendments thereof, if any) with Contractors;
    - 5.2.4. Pro forma update to the Financial Model, including any sensitivities, using the financing terms agreed from Phase 2. This updated financial model will not become a Financial Model Update until Financial Close. The pro forma updated financial model described in this <u>Section 5.2.4</u> will be used for analysis purposes only; and
    - 5.2.5. Model auditor report (including tax and accounting sign off).
  - 5.3. Within three days after IFA's approval of the Bank Final Submission, if Developer has elected to include a right to match for the Core Lender(s), Developer shall deliver to the Core Lender(s) Notice setting forth all the material financing terms to be matched and informing the Core Lender(s) that it has ten days from delivery of the Notice to exercise its right to match.
  - 5.4. The right to match shall be capable of exercise only by the Core Lender(s) delivered to Developer within such ten-day period Notice setting forth: (a) an unconditional election to match. (b) the total amount of the financing they elect to match (which amount is subject to the constraints set forth herein), (c) confirmation that all the financing terms have received credit committee approval, and (d) confirmation that the Notice constitutes a firm commitment valid for at least 120 days (or a period consistent with market practice at the time of Phase 3 of the IPDC as reasonably approved by IFA) from the deadline for offer

- submission subject only to the commitment conditions allowed under the terms established for the Bank Final Submission.
- 5.5. Developer shall submit a quantitative assessment, based on the financing terms included in the Bank Final Submission, of the impact on the MAP, based on the interest rate, credit spread, and structure adjustment provisions pursuant to Section 13.7.8 of the Agreement. The quantitative assessment should be conducted through pro forma updates to the Financial Model.

#### 6. Phase 3: Final Submission Phase – Bond Financing Solution

- 6.1. Developer and its Lead Underwriter shall work to finalize the financial structure, preliminary official statement, bond prospectus or other offering documentation. Developer shall submit to IFA: (a) confirmation that there are no further comments on the Agreement or other PPA Documents; (b) confirmation that volume underwriting is committed for a period of at least 120 days or a period consistent with market practice at the time of Phase 3 of the IPDC as reasonably approved by IFA; and (c) the documents outlined in <a href="Section 5.2">Section 5.2</a> (collectively referred to as the "Bond Final Submission"). The Bond Final Submission shall be submitted to IFA for review and approval (in its reasonable discretion). IFA's response to the Bond Final Submission shall be provided within 10 business days after receipt thereof for any initial submittal and 5 business days after receipt of any re-submittal.
- 6.2. The Bond Final Submission is expected to require the following documentation:
  - 6.2.1. Draft preliminary official statement or bond prospectus;
  - 6.2.2. Draft rating letter(s);
  - 6.2.3. Draft Initial Financing Documents and Initial Security Documents, including draft interest rate hedging or other derivative product documentation, if applicable;
  - 6.2.4. Final Contracts (and amendments thereof, if any) with Contractors:
  - 6.2.5. A pro forma update to the Financial Model, including any sensitivities, using the financing terms agreed from Phase 2. This updated financial model will not become a Financial Model Update until Financial Close. The pro-forma updated financial model described in this <u>Section 6.2.5</u> will be used for analysis purposes only; and
  - 6.2.6. Model auditor report (including tax and accounting sign off).
- 6.3. Within three days after IFA's approval of the Bond Final Submission, if Developer has elected to include a right to match for the Core Underwriter(s), Developer shall deliver to the Core Underwriter(s) written notice setting forth all the material financing terms to be matched and informing the Core Underwriter(s) that it has ten days from delivery of the written notice to exercise its right to match.

6.4. Developer shall submit a quantitative assessment, based on the financing terms included in the Bond Final Submission, of the impact on the MAP, based on the interest rate, credit spread, and structure adjustment provisions pursuant to Section 13.7.8 of the Agreement. The quantitative assessment should be conducted through pro forma updates to the Financial Model.

#### 7. Phase 4: Financial Close Phase

- 7.1. During Phase 4, Developer shall require Lenders to submit their credit approval and proceed to Financial Close by the Financial close deadline (subject to Section 13.7.7). No new information will be presented during Phase 4 except for:
  - 7.1.1. Further updates to the Financial Model, including any sensitivities, updated using financing terms agreed from Phase 3. This updated financial model will not become a Base Case Financial Model Update until Financial Close. The updated financial model will be used for analysis purposes only:
  - 7.1.2. Updated financial model audit report (on the Financial Close Financial Model) any errors or omissions identified which change the MAP, will be borne by Developer; and
  - 7.1.3. Final Initial Funding Agreements and Initial Security Documents.
- 7.2. If a bond financing solution is selected by Developer and approved by IFA, Developer shall actively include IFA and its advisors in the marketing and pricing activities related to the bond underwriting process.
- 7.3. During the final pricing of any interest rate hedging instruments. IFA and its advisors shall have the right to monitor and verify the pricing of those instruments.
- 7.4. Subject to Section 13.7.10 of the Agreement, the Financial Model, or Base Case Financial Model Update, if applicable, will be updated to reflect final Initial Financing Agreements and fluctuations in Benchmark Interest Rate(s), Credit Spread Fluctuations, and changes to Other Financing Terms, if any.

#### EXHIBIT 19

#### INSURANCE COVERAGE REQUIREMENTS

#### 1. Builder's Risk Insurance during Construction

At all times during the period from the commencement of Construction Work until the Substantial Completion Date, Developer shall produce and keep in force, or cause to be produced and kept in force, a builder's risk insurance as specified below.

- (a) The policy shall provide coverage for "all risks" of direct physical loss or damage to the portions or elements of the East End Crossing under construction, with no exclusions or restrictions for terrorism, earthquake, earth movement, volcanic activity, tsunami, flood, storm, tempest, windstorm, hurricane, tornado, ice flow, subsidence, or loss of materials while waterborne or under the water. The policy shall contain extensions of coverage that are typical for a project of the nature of the East End Crossing and shall contain only those exclusions that are typical for a project of the nature of the East End Crossing. Any limitations or extensions of coverage to the tunnel exposure shall be described in the response to the RFP.
- (b) The policy shall cover (i) all property, roads, buildings, bridge structures, other structures, fixtures, materials, supplies, foundations, pilings, machinery and equipment that are part of or related to the portions or elements of the East End Crossing under construction, and the works of improvement, including permanent and temporary works and materials, and including goods intended for incorporation into the works located at the Project Right of Way, in storage or in the course of transit to the Project Right of Way and all improvements that are within the Project Right of Way.
- (c) The policy shall provide coverage per occurrence up to the full replacement cost or a loss limit based on a Probable Maximum Loss (PML) study of the covered property loss, and will include reasonable sublimits for professional fees, demolition and debris removal, without risk of co-insurance; provided, however, that the policy may include appropriate sublimits for earthquake, earth movement, tsunami and flood but in no event less than \$50,000,000 aggregate each for earthquake and flood. If a PML option is used, then the study supporting the PML must be provided to IFA, and the PML may only be used as an afternative if it is approved, in writing, by IFA.
- (d) Developer, IFA and the Design-Build Contractor shall be the named insureds on the policy as their respective interests appear. Developer also may, but is not obligated to, include other Contractors and interested parties as additional insureds as their respective interests appear. The policy shall be written so that no act or omission of any insured shall vitiate coverage of the other named insureds. Developer may name itself or the Collateral Agent as loss payee under the policy. The proceeds of the policy shall be held by the loss payee and timely applied to the cleanup, repair and reconstruction of the East End Crossing.
- (e) The policy shall include coverage for (i) foundations, including pilings, but excluding normal settling, shrinkage, or expansion, (ii) physical damage resulting from machinery accidents but excluding normal and natural wear and tear, corrosion, erosion, inherent vice or latent defect in the machinery, (iii) plans, blueprints and specifications, (iv) physical damage resulting from faulty work or faulty materials, but excluding the cost of making

good such faulty work or faulty materials, (v) physical damage resulting from design error or omission but excluding the cost of making good such design error or omission, (vi) demolition and debris removal coverage, (vii) the increased replacement cost due to any change in applicable codes or other Laws, (viii) expense to reduce loss, (ix) building ordinance compliance, with the building ordinance exclusion deleted, and (x) "soft cost expense" (including costs of Governmental Approvals, mitigation costs, attorneys' fees, and other fees and costs associated with such damage or loss or replacement thereof). The sublimit for coverages (vii) and (ix) shall be not less than \$10,000,000.

(f) The policy shall provide a deductible not exceeding \$1,000,000 per occurrence. If a \$1,000,000 per-occurrence deductible is not available for catastrophe perils such as earthquake, windstorm or flood; then a percentage deductible, not to exceed 3%, shall be acceptable. Also, see 15.7.11 of the Public Private Agreement, Seismic Event, for IFA responsibilities for the earthquake (seismic event) deductible.

#### 2. Property Insurance

Commencing on the Substantial Completion Date and continuing through the Operating Period, Developer shall procure and keep in force, or cause to be procured and kept in force, a policy of property insurance as specified below.

- (a) The policy shall provide coverage for "all risks" of direct physical loss or damage to the O&M Limits, with no restrictions or exclusions (except certain sublimits as noted below) for terrorism, earthquake, earth movement, volcanic activity, tsunami, flood, storm, tempest, windstorm, hurricane, tornado, ice flow, subsidence, or loss of property while waterborne or under the water. The policy shall contain extensions of coverage that are typical for a project of the nature of the East End Crossing, and shall contain only those exclusions that are typical for a project of the nature of the East End Crossing.
- (b) The policy shall cover all property, roads, buildings, bridge structures, other structures, fixtures, materials, supplies, foundations, pilings, machinery and equipment that are part of or related to the East End Crossing and within the O&M Limits.
- (c) The policy shall provide coverage per occurrence sufficient to reinstate the insured property for a limit not less than the probable maximum loss, and will include reasonable sublimits for professional fees, demolition and debris removal, without risk of coinsurance. Developer and its insurance consultant shall perform the maximum probable loss analysis using industry standard underwriting practices. The probable maximum loss analysis and recommended policy limit based thereon shall be subject to the review and comment by IFA to verify reasonableness under industry standard underwriting practices, prior to issuance of the policy or renewal of any policy. Developer and its insurance consultant shall review every two years the probable maximum loss values for the covered property and shall adjust the coverage limit accordingly for the period during which the property Insurance Policy is required hereunder.
- (d) Developer and IFA shall be the named insureds on the policy. Developer also may, but is not obligated to, include Contractors and other interested parties as additional insureds as their respective interests appear. The policy shall be written so that no acts or omissions of a named insured shall vitiate coverage of the other named insureds. IFA and/or the Collateral Agent shall be named as loss payee under the policy. If IFA receives proceeds of such insurance for insured loss or damage, IFA shall hold such proceeds available to pay and reimburse Developer for reasonable costs it incurs to repair and replace the loss or damage (i)

first, to the East End Crossing and (ii) second, from remaining proceeds, if any, to property described in <u>Sections 15.7.9.1</u> and <u>15.7.9.2</u> of the Agreement. However, at Developer's request, IFA will negotiate an amendment to the Project Trust Agreement for the purpose of establishing a property insurance proceeds account under the Project Trust Agreement, on commercially reasonable terms that shall include joint control of funds therein, into which such proceeds during the last five years of the Term will be deposited and held available for use to pay for restoration and repair of the damage or loss (with unspent proceeds, if any, to be disposed of in the same manner as proceeds in the Handback Requirements Reserve).

- To the extent available, the policy shall include coverage for (i) foundations, including pilings, but excluding normal settling, shrinkage, or expansion, (ii) physical damage resulting from machinery accidents but excluding normal and natural wear and tear, corrosion, erosion, inherent vice or latent defect in the machinery, (iii) plans, blueprints and specifications, (iv) physical damage resulting from faulty work or faulty materials, but excluding the cost of making good such faulty work or faulty materials, (v) physical damage resulting from design error or omission but excluding the cost of making good such design error or omission, (vi) physical damage resulting from mechanical breakdown or electrical apparatus breakdown. (vii) demolition and debris removal coverage, (viii) the increased replacement cost due to any change in applicable codes or other Laws, (ix) expense to reduce loss, (x) building ordinance compliance, with the building ordinance exclusion deleted, (xi) "soft cost expense" (including costs of Governmental Approvals, mitigation costs, attorneys' fees, and other fees and costs associated with such damage or loss or replacement thereof) and (xii) an automatic limit of \$20,000,000 or larger if needed for construction during the Operating Period (unless the value of construction is less than \$20,000,000, in which case the required sublimit can be less than \$20,000,000 so long as such sublimit is no less than the value of construction). The sublimit for coverages (vii) and (xi) shall be not less than \$10,000,000.
- (f) The policy shall provide a deductible not exceeding \$1,000,000 per occurrence. If a \$1,000,000 per-occurrence deductible is not available for catastrophe perils such as earthquake, windstorm or flood; then a percentage deductible, not to exceed 3%, shall be acceptable. Also, see 15.7.11 of the Public Private Agreement, Seismic Event, for IFA responsibilities for the earthquake (seismic event) deductible.

#### 3. Delayed Opening and Business Interruption Insurance

Developer shall procure, either as part of the builder's risk and property policies or as a separate business interruption policy procured concurrently with the builder's risk and property policies, and shall keep in effect or cause to be kept in effect, delayed opening insurance coverage (from the date of NTP2 until the Substantial Completion Date, and business interruption insurance coverage from and after the Substantial Completion Date through the remainder of the Term that satisfies the following requirements.

- (a) Such Delayed Opening and Business Interruption coverage shall insure against interruption or loss of Availability Payments and, where applicable, additional interest costs due to delayed Milestone Payments resulting from physical loss or damage to any portion of the East End Crossing caused by occurrence of any risk which is required to be insured under the builder's risk or property insurance policies specified in Sections 1 and 2 above.
- (b) The Delayed Opening and Business Interruption insurance shall cover interruption or loss of Availability Payments and, where applicable, additional interest costs due to delayed Milestone Payments for up to one full year for the coverage after the deductible

period from the following: (i) for the coverage against occurrences that take place prior to the Substantial Completion Date, the date Substantial Completion would have occurred absent occurrence of the insured risk; or (ii) for the coverage against occurrences that take place on or after to the Substantial Completion Date, the date of the interruption.

- (c) For policies issued after the Substantial Completion Date, the amount of coverage shall be adjusted annually to reflect the estimated Availability Payments for the next 12-month period. IFA and Developer shall be named insureds with respect to such coverages. The policy shall be written so that no acts or omissions of a named insured shall vitiate coverage of the other named insureds.
- (d) The policy shall provide a deductible per occurrence not exceeding the first 90 days of loss following the date of interruption.
- (e) The policy shall be in form and substance as is then standard in the State for policies of like coverage.
- (f) Any limitations or extensions of coverage to the tunnel exposure, shall be described in the response to the RFP.

#### Commercial General Liability Insurance

At all times during the Term, Developer shall procure and keep in force, or cause to be procured and kept in force, commercial general liability insurance as specified below.

- (a) The policy shall provide the latest form of ISO standard or greater wording, and shall be an occurrence form. The policy shall contain extensions of coverage that are typical for a project of the nature of the East End Crossing, and shall contain only those exclusions that are typical for a project of such nature.
- (b) The policy shall insure against the legal liability of the insureds named in <u>Section 4(d)</u> below, relating to claims by third parties for accidental death, bodily injury or illness, property damage, personal injury and advertising injury, and shall include the following specific coverages:
  - (i) Contractual fiability:
  - (ii) Premises/operations;
  - (iii) Independent contractors:
  - (iv) Products and completed operations;
  - (v) Broad form property damage;
  - (vi) Hazards commonly referred to as "XCU", including explosion, collapse and underground property damage;
    - (vii) Fellow employee exclusion deleted;
    - (viii) Incidental medical malpractice;

- (ix) No exclusion for work performed within 50 feet of a railroad;
- (x) No professional services exclusion except the latest ISO form CG
  - (xi) Broad named insured endorsement; and
- (xii) Non-owned automobile liability, unless covered by the automobile liability policy pursuant to <u>Section 5</u> of this <u>Exhibit 19 (Insurance Coverage</u> Requirements).
- (c) The policy shall have limits of not less than \$100,000,000 per occurrence and in the aggregate per policy period, except as noted in <u>Section 15</u> below. Such limits shall be shared by all insured and additional insured parties. As noted in <u>Section 17.1.6</u> of the Agreement, Developer shall have the right to satisfy the requisite insurance coverage amounts for liability insurance through a combination of primary policies and umbrella or excess policies. Umbrella and excess policies shall comply with all insurance requirements, terms and provisions set forth in the Agreement for the applicable type of coverage.
- (d) Developer shall be a named insured and IFA and the Indemnified Parties including the Collateral Agent shall be additional insureds with respect to the acts, omissions, and activities of Developer and its contractors and subcontractors and subconsultants of every tier. The policy shall be written so that no act or omission of a named insured shall vitiate coverage of the other named insureds.
- (e) Each policy shall provide for a deductible up to \$1,000,000 per occurrence but only if the primary policy and any excess policy are written to obligate the insurers to pay on behalf of the insured on a first dollar basis and to later be reimbursed by the insured.
- (f) With respect to any portion of the East End Crossing that Developer designs and/or builds, but does not operate, maintain or otherwise manage during the Operating Period, the completed operations portion of commercial general liability insurance shall remain in place for no less than ten (10) years after the Substantial Completion Date. For all other parts of the East End Crossing, commercial general liability insurance, including completed operations, shall remain in place for the entire Operating Period.

#### 5. Automobile Liability Insurance

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At all times during the Term, Developer shall produre and keep in force or shall cause to be produred and kept in force commercial automobile liability insurance as specified below.

- (a) Each policy shall cover accidental death, bodily injury and property damage liability arising from the ownership, maintenance or use of all owned, non-owned and hired vehicles connected with performance of the Work, including loading and unloading. The policy shall contain extensions of coverage that are typical for a project of the nature of the East End Crossing, and shall contain only those exclusions that are typical for a project of the nature of the East End Crossing.
- (b) Developer and Design-Build Contractor shall be the named insured under its automobile liability policy.

- (c) Developer's policy shall have limits not less than \$25,000,000 each accident or shall be scheduled under the umbrella required in Section 13 below (Project-Specific Limits / On-Project Right of Way Coverage) or as required in Section 14 below (All Other Limits / Off-Project Right of Way Coverage), except as noted in Section 15 below. As noted in Section 17.1.6 of the Agreement, Developer shall have the right to satisfy the requisite insurance coverage amounts for liability insurance through a combination of primary policies and umbrella or excess policies. Umbrella and excess policies shall comply with all insurance requirements, terms and provisions set forth in the Agreement for the applicable type of coverage.
- (d) Each policy shall provide a deductible not exceeding \$50,000 per occurrence.
- (e) A deductible of \$500,000 per occurrence but only if the primary policy and any excess policy are written to obligate the insurers to pay on behalf of the insured on a first dollar basis and later be reimbursed by the insured.

#### 6. Contractor's Pollution Liability Insurance

At all times during the period from the commencement of Construction Work until the Substantial Completion Date, Developer shall procure and keep in force, or cause to be procured and kept in force, contractor's pollution liability insurance on an occurrence basis as specified below.

- (a) The policy shall cover sums that the insured becomes legally obligated to pay to a third party or for the investigation, removal, remediation (including associated monitoring) or disposal of soil, surface water, groundwater or other contamination to the extent required by environmental laws (together "clean-up costs") caused by pollution conditions resulting from covered operations, subject to the policy terms and conditions, including bodily injury, property damage (including natural resource damages), clean-up costs, and legal defense costs. Such policy shall cover claims related to pollution conditions to the extent such are caused (i) by the performance of Work, (ii) by transportation, including loading and unloading, by owned and non-owned vehicles or (iii) by other activities performed by or on behalf of Developer that occur on the East End Crossing during the period from the commencement of Construction Work until the Substantial Completion Date. The policy shall have no exclusions or limitations for loss occurring over water including but not limited to a navigable waterway.
- (b) Developer shall be a named insured and the Indemnified Parties shall be the additional insureds under such policy. The policy shall be written so that no acts or omissions of a named insured shall vitiate coverage of the other named insureds. The insured vs. insured exclusion shall not apply to additional insureds named to the policy.
- (c) The policy shall have a limit of not less than \$50,000,000 per occurrence and in the aggregate per policy period, unless applicable regulatory standards impose more stringent coverage requirements and except as noted in Section 15 below.
- (d) The policy shall contain no exclusions that will restrict coverage for loss on, about or under water.
- (e) The policy shall provide a deductible not exceeding \$500,000 per occurrence.

#### 7. Professional Liability Insurance

At all times during the Term that professional services are rendered respecting design and construction of the East End Crossing (which services are conclusively presumed to start on the Effective Date) until the first to occur of (1) ten years after the professional services have concluded for the East End Crossing or (2) expiration of all applicable statutes of limitation and repose applicable to professional services performed for the East End Crossing, Developer shall cause the Design-Build Contractor and the Lead Engineering Firm (in the case of the Design Work) and each Contractor that is under direct contract with Developer and provides professional services to Developer respecting such design and construction (in the case of any other design or engineering work) to produre and keep in force professional liability insurance as specified below.

- (a) Each policy shall provide coverage of liability of the party performing the professional services arising out of any negligent act, error or omission in the performance of professional services or activities for the East End Crossing.
- (b) The Design-Build Contractor and the Lead Engineering Firm shall each have a limit of not less than \$20,000,000 per claim and in the aggregate. For all other Contractors performing professional services, the policy shall have the limits specified in Table 7:

Table 7

CONTRACT AMOUNT	LIMITS OF LIABILITY	YEARS COVERAGE TO REMAIN IN PLACE AFTER COMPLETION
A (AD ADD A F 200 200	\$ 1,000,000 Each Claim	
\$ 100,000 - \$ 3,000,000	\$ 1,000,000 Aggregate	3 Years
<b>A</b> A A A A A A A A A A A A A A A A A A	\$ 2,000,000 Each Claim	
\$ 3,000,001 - \$ 5,000,000	\$ 2,000,000 Aggregate	5 Years
	\$ 5,000,000 Each Claim	
Over \$ 5,000,000	\$ 5,000,000 Aggregate	5 Years

- (c) If the policy is project-specific, then the policy limit shall be \$20,000,000 per claim and in the aggregate for all firms insured on the policy.
- (d) Each annual practice policy shall provide a deductible, as evidenced on a certificate of insurance, not exceeding \$250,000 per claim. Any project-specific policy shall provide a deductible not exceeding \$1,000,000 per claim.
- (e) If a project-specific policy is purchased and it does not include a ten-year extended reporting period after Substantial Completion, then the annual practice policies of the Design-Build Contractor and the Lead Engineering Firm shall each be required to remain in

place at the limits required in Section 7(b) above for the balance of the ten year period or expiration of all applicable statutes of limitation and repose applicable to professional services performed for the East End Crossing. If the project-specific policy is purchased in the name of a joint venture or other special purpose entity formed by the Developer and or its team, and if the project-specific policy has an extended reporting period of five years, and such entity will not maintain its own separate professional liability coverage after the expiration of the project-specific policy, then this requirement can be satisfied by having the Key Contractor(s) and the Lead Engineering Firm(s) that were members of the joint venture or special purpose entity maintain the required coverage for the balance of the ten-year reporting period.

(f) All project-specific or annual practice policies shall maintain a retroactive date that shall be no later than the first date that the Design-Build Contractor or Lead Engineering Firm or any other firm required to maintain professional liability insurance began providing professional services for any Developer-Related Entity with respect to the East End Crossing.

### 8. Workers' Compensation Insurance

At all times when work is being performed by any employee of Developer, all Contractors, subcontractors and subconsultants, Developer shall procure and keep in force, or cause to be procured and kept in force, a policy of workers' compensation insurance in conformance with applicable Law. Developer and/or the Contractors, subcontractors and subconsultants, whichever is the applicable employer, shall be the named insured on these policies. The workers' compensation Insurance Policy shall contain the following endorsements:

- (a) A voluntary compensation endorsement;
- (b) An alternative employer endorsement; and
- (c) An endorsement extending coverage to all states operations on an "if any" basis.

The workers compensation policy shall also include, by separate policy or by endorsement, U.S. Longshoremen's and Harbor Workers coverage, including, if applicable, Jones Act and Federal Employer's Liabilities Act coverage.

### 9. Employer's Liability Insurance

At all times during the Term, Developer shall procure and keep in force, or cause to be procured and kept in force, employer's liability insurance for Developer, each Contractor and each Contractor's subcontractors as specified below.

- (a) The policy/ies shall insure against liability for death, bodily injury, illness or disease for all employees of Developer, the Contractor and all subcontractors and subconsultants working on or about any Project Right of Way or otherwise engaged in the Work.
- (b) Developer and/or the Contractor and all subcontractors and subconsultants, whichever is the applicable employer, shall be the named insured.
- (c) The policy shall have a limit of not less than \$100,000,000 per accident, except as noted in Section 15 below. As noted in Section 17.1.6 of the Agreement, Developer

shall have the right to satisfy the requisite insurance coverage amounts for liability insurance through a combination of primary policies and umbrella or excess policies. Umbrella and excess policies shall comply with all insurance requirements, terms and provisions set forth in the Agreement for the applicable type of coverage.

(d) The policy may include commercially reasonable deductibles to the extent permitted by applicable Law. Prior to commencement of Work, Developer shall submit to IFA and obtain its approval of the deductible amounts for all Key Contractors under the policy.

## 10. Primary Vessel Hull and Machinery Insurance

Developer shall procure and keep in force, or cause to be procured and kept in force, where applicable, a policy or policies of primary vessel hull and machinery protective and indemnity insurance providing property and liability coverage for damage or destruction to or caused by all vessels and machinery used in the performance, maintenance, inspection or other purposes in respect of the Work and for maintenance, inspection or other purposes throughout the Operating Period.

- (a) Each policy shall be maintained during the period starting on the date of the first shipment of any materials or equipment for the East End Crossing and ending at the conclusion of the Term.
- (b) The hull and machinery insurance shall provide coverage for not less than the actual cash value.
- (c) The protection and indemnity insurance shall provide coverage of no less than \$25,000,000 combined single limit of liability for bodily injury, property damage and personal injury per occurrence, except as noted in <a href="Section 15">Section 15</a> below. Such limit shall be shared by all insured and additional insured parties. As noted in <a href="Section 17.1.6">Section 17.1.6</a> of the Agreement, Developer shall have the right to satisfy the requisite insurance coverage amounts for liability insurance through a combination of primary policies and umbrella or excess policies. Umbrella and excess policies shall comply with all insurance requirements, terms and provisions set forth in the Agreement for the applicable type of coverage.
- (d) IFA and the Indemnified Parties shall be additional insureds with respect to liability arising out of the acts or omissions of the named insured on the policy, whether occurring on or off of the Project Right of Way. The policy shall be written so that no act or omission of a named insured shall vitiate coverage of the additional insureds.
- (e) The insurance shall include commercially reasonable deductibles. Prior to commencement of Work, Developer shall submit to IFA and obtain its approval of the deductible amounts under each such Insurance Policy.

#### 11. Aviation Insurance

Developer shall procure and keep in force, or cause to be procured and kept in force for each of its Contractors, where applicable, a policy or policies of aviation physical damage and liability insurance providing property and liability coverage for damage or destruction to or caused by any type of aircraft used in the performance of the Work through the Term.

(a) Each policy shall be maintained during the period starting on the date of

the first shipment of any materials or equipment for the East End Crossing and ending on the Final Acceptance Date.

- (b) The physical damage insurance shall provide coverage for not less than the actual cash value. The liability insurance shall provide coverage of no less than \$25,000,000 combined single limit of liability for bodily injury, property damage and personal injury per occurrence, except as noted in <a href="Section 15">Section 15</a> below. Such limit shall be shared by all insured and additional insured parties. As noted in <a href="Section 17.1.6">Section 17.1.6</a> of the Agreement, Developer shall have the right to satisfy the requisite insurance coverage amounts for liability insurance through a combination of primary policies and umbrella or excess policies. Umbrella and excess policies shall comply with all insurance requirements, terms and provisions set forth in the Agreement for the applicable type of coverage.
- (c) IFA and the Indemnified Parties shall be additional insureds with respect to liability arising out of the acts or omissions of the named insured on the policy, whether occurring on or off of the Project Right of Way. The policy shall be written so that no act or omission of a named insured shall vitiate coverage of the additional insureds.
- (d) The insurance shall include commercially reasonable deductibles. Prior to commencement of Work, Developer shall submit to IFA and obtain its approval of the deductible amounts under each such Insurance Policy.

#### 12. Contractors' Insurance

- (a) At all times during the Term, Developer shall cause each Contractor that performs Work on the Project Right of Way to provide commercial general liability insurance that complies with Section 17.1 of the Agreement, with policy limits as required in Sections 14 or 15 below, whichever is applicable, and commercially reasonable deductibles, in circumstances where the Contractor is not covered by Developer-provided or lead Design-Build Contractor provided liability insurance. Developer shall cause each such Contractor that provides such insurance to include each of the Indemnified Parties as additional insureds under such Contractor's liability Insurance Policies. Such insurance need not be East End Crossing-specific. IFA shall have the right to contact the Contractors directly in order to verify the above coverage.
- (b) At all times during the Term, Developer shall cause each Key Contractor that has vehicles on the Project Right of Way or uses vehicles in connection with the Work to produce and keep in force, comprehensive, business, or commercial automobile liability insurance meeting the requirements as specified below.
  - (i) Each policy shall cover accidental death, bodily injury and property damage liability arising from the ownership, maintenance or use of all owned, non-owned and hired vehicles connected with performance of the Work, including loading and unloading. The policy shall contain extensions of coverage that are typical for a project of the nature of the East End Crossing, and shall contain only those exclusions that are typical for a project of the nature of the East End Crossing.
  - (ii) Each such Key Contractor shall be the named insured under its respective automobile liability policy.
    - (iii) Each policy shall have a policy limit of \$24,000,000 each accident.

except as noted in <u>Sections 14</u> and <u>15</u> below. As noted in <u>Section 17.1.6</u> of the Agreement, Developer shall have the right to satisfy the requisite insurance coverage amounts for liability insurance through a combination of primary policies and umbrella or excess policies. Umbrella and excess policies shall comply with all insurance requirements, terms and provisions set forth in the Agreement for the applicable type of coverage.

- (iv) Each policy shall provide a deductible not exceeding \$50,000 per occurrence
- (v) A deductible of \$500,000 per occurrence but only if the primary policy and any excess policy are written to obligate the insurers to pay on behalf of the insured on a first dollar basis and later be reimbursed by the insured.
- (vi) Each policy shall include each of the Indemnified Parties as additional insureds.
- (c) At all times during the Term, Developer shall cause each Contractor that has vehicles on the Project Right of Way or uses vehicles in connection with the Work (other than Key Contractors subject to subsection (b) above) to maintain an automobile liability policy which provides at least the minimum coverage for its employees and automobiles that is required by Law or as required in <u>Section 14</u>, whichever is higher. Developer shall cause each such Contractor to include in the policy each of the Indemnified Parties as additional insureds.

#### 13. Project-Specific Limits / On-Project Right of Way Coverage

Developer, either directly or through its Contractor(s) shall provide project-specific limits for all of the following coverages:

- (a) Builders Risk/Property Insurance
- (b) Commercial General Liability Insurance
- (c) Workers Compensation and Employers Liability
- (d) Umbrella/Excess liability insurance (to be no less broad than all scheduled primary insurance)
- (e) Pollution Insurance

Providing professional liability coverage on a project-specific basis is optional.

If the above coverages are provided as part of an overall Controlled Insurance Program (CIP) sponsored by Developer or a Contractor, then any Contractor required coverages listed above shall be satisfied by the CIP program as long as the CIP program meets the overall requirements described in this Exhibit 19. For coverages (b), (c), and (d) above, the total limits provided shall be not less than \$100,000,000 each occurrence and in the aggregate, except as noted in Section 15 below. For coverage (e), Pollution Liability, the limit shall be not less than \$50,000,000 each occurrence and in the aggregate, except as noted in Section 15 below. For professional liability, if provided on a project-specific basis, the limit shall not be less than \$20,000,000 each claim and in the aggregate, except as noted in Section 15 below. For those

project participants working on the Project Right of Way and not included in the CIP, they shall provide limits in accordance with <u>Section 14</u> or <u>15</u> below, whichever is applicable.

With respect to loss arising from the operation of watercraft, the CIP Umbrella/Excess liability coverage shall be not less than \$75,000,000 each occurrence and in the aggregate in limits excess of the underlying required protection and indemnity insurance of \$25,000,000 each occurrence, except as noted in Section 15 below. If the CIP insurer is not capable of providing such an extension, then the CIP sponsor shall provide an alternative approach to provide not less than \$75,000,000 in excess limits for liability arising from the operation of watercraft on behalf of the project, except as noted in Section 15 below.

The term "On-Project Right of Way" shall be defined as follows: With respect to the portion of the project that is on land, that which is "On-Project Right of Way" shall include all areas within the borders shown on the maps in set forth in ROW Maps. With respect to the portion of the East End Crossing that is over the river, that which is "On-Project Right of Way" shall include all elements of the bridge and its foundations including any temporary structures.

#### 14. All Other Limits / Off-Project Right of Way Coverage

Any Contractor or other contractor, subcontractor, design firm, fabricator or other entity that is not included in the CIP and/or is performing work off Project Right of Way shall maintain the following coverages:

- (a) Commercial General Liability/Completed Operations Insurance
- (b) Business Auto including liability and physical damage
- (c) Workers Compensation and Employers Liability
- (d) Primary Vessel Hull and Machinery Insurance (if applicable)
- (e) Aviation Insurance (if applicable)
- (f) Umbrella/Excess liability insurance
- (g) Professional liability (if applicable and if not insured on a project-specific policy)
- (h) Pollution Insurance

For contracts with Contractors, other contractors, subcontractors, firms or entities not included in the CIP and in excess of \$10,000,000 or contracts of any amount that involve demolition, utility relocation, or transportation of hazardous waste, the limits required shall not be less than \$10,000,000 each occurrence or in the aggregate. An umbrella or excess policy may be used to achieve the required policy limit of not less than \$10,000,000 each occurrence or in the aggregate. For all contracts with Contractors, other contractors, subcontractors, firms or entities not included in the CIP and valued under \$10,000,000 and not involving demolition, utility relocation or transportation of hazardous waste, the required limits are outlined in Table 14. For all contracts with Contractors, other contractors, subcontractors, firms or entities not included in the CIP and valued under \$10,000,000 and not involving demolition, utility relocation or transportation of hazardous waste. Commercial General Liability/Completed Operations must only be maintained until completion of such Contractor's work or services. An umbrella or

excess policy may be used to achieve the required policy limits. Professional liability limits requirements are outlined in <u>Section 7(b)</u> above.

Table 14

CONTRACT AMOUNT	LIMITS OF LIABILITY	YEARS COVERAGE TO REMAIN IN PLACE AFTER COMPLETION
\$ 100,000 - \$ 3,000,000	\$ 1,000,000 Each Claim \$ 1,000,000 Aggregate	3 Years
\$ 3,000,001 ~ \$ 5,000,000	\$ 2,000,000 Each Claim \$ 2,000,000 Aggregate	5 Years
Over \$ 5,000,000	\$ 5,000,000 Each Claim (\$ 3,000,000 Each Claim for 14(b) policies) \$ 5,000,000 Aggregate (\$ 3,000,000 Aggregate for 14(b) policies)	5 Years

## 15. Policy Limits From the Effective Date Until NTP2.

From the Effective Date until NTP2, for the following policies, the policy limits shall be no less than \$10,000,000 each claim and in the aggregate or per accident, as applicable:

- Commercial General Liability Insurance
- Automobile Liability Insurance
- Professional Liability Insurance
- Employer's Liability Insurance
- Primary Vessel Hull and Machinery Insurance, if and when applicable
- Aviation Insurance, if and when applicable
- Contractors' Insurance

If the limits required in <u>Section 15</u> exceed what is required in <u>Section 14</u>, then the lesser amount required in Section 14 shall be acceptable.

For purposes of clarity, Developer shall be deemed to have acquired and maintained the policies required under this <u>Section 15</u> if its, and its relevant Contractors', corporate/institutional insurance programs (a) contain each of these prescribed policies, (b) at or in excess of the policy limits prescribed under this <u>Section 15</u> and (c) otherwise are on the terms and subject to conditions substantially similar to those prescribed for each such policy (excepting policy limits)

#### under this Exhibit 19.

## 16. Contractor Tools and Equipment

None of the builders risk or property insurance policies described above shall apply to Contractors' tools or any equipment used by any Contractor to perform their work. All Contractors and Subcontractors shall be responsible for loss to their tools or any equipment used to perform their work and shall be responsible for purchasing insurance coverage for loss to such tools including loss of use over water and underwater.

#### EXHIBIT 20

## FORMS OF PAYMENT BOND AND PERFORMANCE SECURITY

- 20-A Form of Payment Bond\*
- 20-B Form of Performance Bond\*
- 20-C Form of Multiple Obligee Rider for Payment Bond\*\*
- 20-D Form of Multiple Obligee Rider for Performance Bond\*\*
- 20-E Form of Performance Letter of Credit

\*If the bond is to secure the payment or performance obligations of Developer rather than the Design-Build Contractor or other prime Contractor, then the form of bond shall be revised to reflect Developer as the "Principal" or "Contractor", IFA and KYTC in place of Developer as the bond obligee, and the Agreement as the "Contract".

\*\* If the bond is to secure the payment or performance obligations of Developer rather than the Design-Build Contractor or other prime Contractor, then the form of multiple obligee rider shall be revised to reflect IFA and KYTC as the "Primary Obligee" and the Collateral Agent as the "Additional Obligee".

## EXHIBIT 20-A

### FORM OF PAYMENT BOND

Bond No.
For
The East End Crossing
KNOW ALL WHO SHALL SEE THESE PRESENTS:
THAT WHEREAS, The Indiana Finance Authority, a body corporate and politic, not a state agency but an instrumentality exercising essential public functions, of the State of Indiana ("IFA") has awarded to WVB East End Partners, LLC (the "Developer" or "Obligee"), a Public-Private Agreement, East End Crossing (Louisville-Southern Indiana Ohio River Bridges Project) (the "Agreement") to design, build, finance, operate and maintain the East End Crossing (the "East End Crossing") through a public-private partnership;
AND WHEREAS, [Contractor Name] an entity duly authorized to do business in the State of Indiana (the "Principal" or "Contractor") has entered into a contract (the "Contract") with Developer bearing the date of related to the performance of design and
construction work for the East End Grossing, which Contract is specifically incorporated by reference herein, said work to be done according to the terms of the Contract;  AND WHEREAS, it is one of the conditions of the Contract and the Agreement that these presents shall be executed;
NOW THEREFORE, We the undersigned Principal and(the "Surety" or "Co-Sureties") are firmly bound and held unto the Obligee, in the penal sum of Dollars
(\$) good and lawful money of the United States of America for the payment whereof, well and truly to be paid to the Obligee, we bind ourselves, our heirs, successors, executors, administrators, and assigns, jointly and severally, firmly by these presents.
THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH THAT:
1. If the Principal shall comply with all requirements of law and pay, as they become due, all just claims for labor performed and materials and supplies furnished upon or for the work under the Contract, whether said labor be performed and said materials and supplies be furnished under the original Contract, any subcontract, or any and all duly authorized modifications thereto, then these presents shall become null and void; otherwise they shall remain in full force and effect.
2. The Surety (or Co-Sureties) agree(s) that no change, extension of time, alterations,

additions, omissions or other modifications of the terms of the Contract, or in the work to be performed with respect to the East End Crossing, or in the specifications or plans, or any

change or modification of any terms of payment or extension of time for any payment pertaining or relating to the Contract, or any conditions precedent or subsequent in this Bond attempting to limit the right of recovery of claimants otherwise entitled to recover under this Bond, or any fraud practiced by any other person other than the claimant seeking to recover this Bond, shall in any way affect its obligations on this Bond, and it does hereby waive notice of such changes, extension of time, alterations, additions, omissions or other modifications.

3. <b>[Use in case of multiple or</b> representative with authority to act of so that the Obligee and claimant hereunder. All correspondence from under this Bond shall be sent representative may be changed on certified mail, return receipt requests signed by all of the Co-Sureties. The	on behaif of s will have the Oblige to such of the Oblige to the Oblige to such of the Oblige to the Oblige initial representation.	all of the Co-Sureties of no obligation to dece or claimants to the Codesignated representative of written notice (by Obligee designating a signature shall be	with respect to this Bond, all with multiple sureties co-Sureties and all claims ative. The designated personal delivery or by ingle new representative,
IN WITNESS WHEREOF, we have i	hereunto se in this	et our hands and seals day_of	on this at, A.D., 20
	Address:		
	Ву:		
	Contact N	lame:	
Surety (full legal name):			····
Address:			
Ву:			
Contact Name:			****
Phone: ( )			<del></del>

[Note: If more than one surety, then add appropriate number of lines to signature block.]

[Note. The bond shall be signed by authorized persons. Where such persons are signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the legal entity involved, evidence of authority must be furnished.]

## EXHIBIT 20-8

#### FORM OF PERFORMANCE BOND

Bond No.
For
The East End Crossing
KNOW ALL WHO SHALL SEE THESE PRESENTS:
THAT WHEREAS, The Indiana Finance Authority, a body corporate and politic, not a state agency but an instrumentality exercising essential public functions, of the State of Indiana ("IFA") has awarded to WVB East End Partners, LLC (the "Developer" or "Obligee"), a Public-Private Agreement, East End Crossing (Louisville-Southern Indiana Ohio River Bridges Project) (the "Agreement") to design, build, finance, operate and maintain the East End Crossing through a public-private partnership;
AND WHEREAS, [Contractor Name] an entity
duly authorized to do business in the State of Indiana (the "Principal" or "Contractor") has entered into a contract (the "Contract") with Developer bearing the date of
, related to the performance of design and construction work for the East End Crossing, which Contract is specifically incorporated by reference herein, said work to be done according to the terms of the Contract;
AND WHEREAS, it is one of the conditions of the Contract and the Agreement that these presents shall be executed;
NOW THEREFORE, We the undersigned Principal and (the "Surety" or "Co-Sureties") are firmly bound and held unto the Obligee, in the penal sum of Dollars
(\$) good and lawful money of the United States of America for the payment whereof, well and truly to be paid to the Obligee, we bind ourselves, our heirs, successors, executors, administrators, and assigns, jointly and severally, firmly by these presents.
THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH THAT:
1. If the Principal shall in all things stand to and abide by and well and truly keep, perform and complete all covenants, conditions, agreements, obligations and work under the Contract, including any and all amendments, supplements, and alterations made to the Contract as therein provided, on the Principal's part to be kept and performed at the time and in the manner therein specified, if the Principal shall indemnify and save harmless the Obligee, its directors, officers and agents, as therein stipulated, and if the Principal shall reimburse upon demand of the Obligee any sums paid the Principal which exceed the final payment determined to be due upon completion of the East End Crossing, then these presents shall become null and void:

otherwise they shall remain in full force and effect.

- 2. The obligations covered by this Bond specifically include liability for liquidated damages and warranties as specified in the Contract, but not to exceed the bonded sum.
- 3. The Surety (or Co-Sureties) agree(s) that no change, extension of time, alterations, additions, omissions or other modifications of the terms of the Contract, or in the work to be performed with respect to the East End Crossing, or in the specifications or plans, or any change or modification of any terms of payment or extension of time for any payment pertaining or relating to the Contract, or any conditions precedent or subsequent in this Bond attempting to limit the right of recovery of claimants otherwise entitled to recover under this Bond, or any fraud practiced by any other person other than the claimant seeking to recover this Bond, shall in any way affect its obligations on this Bond, and it does hereby waive notice of such changes, extension of time, alterations, additions, omissions or other modifications.
- 4. The Surety (or Co-Sureties) agree(s) that payments made to contractors and suppliers to satisfy claims on the payment bond do not reduce the Surety's legal obligations under this Bond. Payments made to contractors or suppliers under any agreement where the Surety has arranged for completion of the work to satisfy this Bond will not be considered payment bond claims.
- 5. Whenever the Principal shall be, and is declared by Developer to be, in default under the Contract, provided that Developer is not then in material default thereunder, the Surety (or Co-Sureties) shall promptly:
  - (a) remedy such default, or
  - (b) complete the work covered by this Bond in accordance with the terms and conditions of the Contract then in effect, or
  - (c) select a contractor or contractors to complete all work covered by this Bond in accordance with the terms and conditions of the Contract then in effect, using a contractor or contractors approved by IFA as required by the Agreement (provided, however, that the Surety may not select the Principal or any affiliate of the Principal to complete the work for and on behalf of the Surety without Developer's express written consent), arrange for a contract meeting the requirements of the Agreement between such contractor or contractors and Developer, and make available as work progresses (even though there should be a default or a succession of defaults under such contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the unpaid balance of the contract price; but not exceeding including other costs and damages for which Surety (or Co-Sureties) is (are) liable hereunder, the bonded sum.
- 6. **[Use in case of multiple or co-sureties]** The Co-Sureties agree to empower a single representative with authority to act on behalf of all of the Co-Sureties with respect to this Bond, so that the Obligee and claimants will have no obligation to deal with multiple sureties hereunder. All correspondence from the Obligee or claimants to the Co-Sureties and all claims under this Bond shall be sent to such designated representative. The designated representative may be changed only by delivery of written notice (by personal delivery or by certified mail, return receipt requested) to the Obligee designating a single new representative, signed by all of the Co-Sureties. The initial representative shall be

IN WITNESS WHEREOF, we h	ave hereunto set our hands and seals	on this at
navanamanananananananananananananananana	on this day of	, A.D., 20
	ing 1	
	Principal (full legal name):	
	-	
	Address:	
		•
	By:	
	Contact Name:	
	Phone: ( )	
Surety (full legal name):		
		******
Address:		
By:		
		******
Contact Name:		
Phone: ( )		

[Note: If more than one surety, then add appropriate number of lines to signature block.]

[Note: The bond shall be signed by authorized persons. Where such persons are signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the legal entity involved, evidence of authority must be furnished.]

#### EXHIBIT 20-C

#### FORM OF MULTIPLE OBLIGEE RIDER

(Payment Bond)

#### MULTIPLE OBLIGEE RIDER

This Rider is executed concurrently with and shall be attached to and form a part of Payment Bond No
WHEREAS, on or about theday of, <u>20</u> , (hereinafter called the "Principal"), entered into a writte
agreement bearing the date of, 20 hereinafter called the "Contract") wit, (hereinafter called the "Primary Obligee") for the performance of
design and construction work for the East End Crossing; and
WHEREAS, the Primary Obligee requires that Principal provide a payment bond anthat the Indiana Finance Authority, a public agency of the State of Indiana ("IFA"), the Kentuck Transportation Cabinet ("KYTC"), an be named as additional obligees under the
payment bond; and
WHEREAS, Principal and the Surety have agreed to execute and deliver this Ride concurrently with the execution of Payment Bond No (hereinafter referred t as "Payment Bond") upon the conditions herein stated.
NOW, THEREFORE, the undersigned hereby agree and stipulate as follows:
IFA, KYTC,, and, and are hereby added to the Payment Bond as named obligees (hereinafte
referred to as "Additional Obligees").

The Surety shall not be liable under the Payment Bond to the Primary Obligee, the Additional Obligees, the claimants under the Payment Bond, or any of them, unless the Primary Obligee, the Additional Obligees, or any of them, shall make payments to the Principal (or in the case the Surety arranges for completion of the Contract, to the Surety) in accordance with the terms of the Contract as to payments and shall perform all other obligations to be performed under the Contract in all material respects at the time and in the manner therein set forth such that no material default by the Primary Obligee shall have occurred and be continuing under the Contract.

The aggregate liability of the Surety under this Payment Bond, to any or all of the obligees, as their interests may appear, is limited to the penal sum of the Payment Bond. The Additional Obligees' rights hereunder are subject to the same defenses Principal and/or Surety have against the Primary Obligee and/or the claimants under the Payment Bond, provided that the Additional Obligees have received notice and 30 days prior opportunity to cure breach or default by the Primary Obligee under the Contract.

The Surety may, at its option, make any payments under the Payment Bond by check issued jointly to all of the obligees.

In the event of a conflict between the Payment Bond and this Rider, this Rider shall govern and control. All references to the Payment Bond, either in the Payment Bond or in this Rider, shall include and refer to the Payment Bond as supplemented and amended by this Rider. Except as herein modified, the Payment Bond shall be and remains in full force and effect.

Signed, sealed and dated this	
	(Principal) (Seal)
	By:
	(Title)
	(Surety) (Seal)
	Ву:
	, Attorney-in-Fact

# EXHIBIT 20-D

## FORM OF MULTIPLE OBLIGEE RIDER

(Performance Bond)

#### MULTIPLE OBLIGEE RIDER

This Rider is executed concurrently with and shall be attached to and form a part o
Performance Bond No
WHEREAS, on or about the day of
agreement bearing the date of, 20 (hereinafter called the "Contract") with, (hereinafter called the "Primary Obligee") for the performance o
design and construction work for the East End Crossing; and
WHEREAS, the Primary Obligee requires that Principal provide a performance bond and that the Indiana Finance Authority, a public agency of the State of Indiana ("IFA"), the Kentucky Transportation Cabinet ("KYTC"), and be named as additional obligees under the
performance bond; and
WHEREAS, Principal and the Surety have agreed to execute and deliver this Ride concurrently with the execution of Performance Bond No (hereinafter referred to as "Performance Bond") upon the conditions herein stated.
NOW, THEREFORE, the undersigned hereby agree and stipulate as follows:
IFA, KYTC,, and, and, are hereby added to the Performance Bond as named obligees (hereinafte
referred to as "Additional Obligees").

The Surety shall not be liable under the Performance Bond to the Primary Obligee, the Additional Obligees, or any of them, unless the Primary Obligee, the Additional Obligees, or any of them, shall make payments to the Principal (or in the case the Surety arranges for completion of the Contract, to the Surety) in accordance with the terms of the Contract as to payments and shall perform all other obligations to be performed under the Contract in all material respects at the time and in the manner therein set forth such that no material default by the Primary Obligee shall have occurred and be continuing under the Contract.

The aggregate liability of the Surety under this Performance Bond, to any or all of the obligees, as their interests may appear, is limited to the penal sum of the Performance Bond. The Additional Obligees' rights hereunder are subject to the same defenses Principal and/or Surety have against the Primary Obligee, provided that the Additional Obligees have received notice and 30 days prior opportunity to cure breach or default by the Primary Obligee under the Contract. The total liability of the Surety shall in no event exceed the amount recoverable from the Principal by the Primary Obligee under the Contract.

The Surety may, at its option, make any payments under the Performance Bond by check issued jointly to all of the obligees.

In the event of a conflict between the Performance Bond and this Rider, this Rider shall govern and control. All references to the Performance Bond, either in the Performance Bond or in this Rider, shall include and refer to the Performance Bond as supplemented and amended by this Rider. Except as herein modified, the Performance Bond shall be and remains in full force and effect.

Signed, sealed and dated this	day of	. 20
	(Principal) (Seal)	
	By:	
		(Title)
	(Surety) (Seal)	
	_By;	
	, Attorney-in-Fact	

# EXHIBIT 20-E

#### FORM OF PERFORMANCE LETTER OF CREDIT

- \* If the letter of credit is to secure the performance obligations of the Design-Build Contractor or other prime Contractor rather than Developer, then:
  - (1) Developer or the Collateral Agent shall be named as the beneficiary;
  - (2) The letter of credit shall include provisions, in form and substance acceptable to IFA, expressly authorizing assignment and transfer of the beneficiary rights to IFA without condition or limitation and expressly permitting IFA to draw without presentation of the original letter of credit;
  - (3) The letter of credit shall include provisions, in form and substance acceptable to IFA, naming IFA as automatic and exclusive transferee beneficiary upon Final Acceptance; and
  - (4) The draw conditions in paragraph 2 of the form of letter of credit shall be revised to reflect a failure of the Contractor to perform its contract obligations under the Contract between Developer and such Contractor.

# IRREVOCABLE STANDBY LETTER OF CREDIT

ISSUE	R:		
PLAC	E FOR PRES	SENTATION OF DRAFT:	
	(Name and Address of Bank/Branch <u>MUST</u> be a United States Bank/Branch)		
APPLICANT: [Name of Developer]			
BENEFICIARY: INDIA		INDIANA FINANCE AUTHORITY	
		Address:	
		Contact Person:	
		Phone No	
LETTE	ER OF CRED	NIT NUMBER:	
PLAC	E AND DATE	E OF ISSUE:	
AMOUNT:		United States Dollars (US\$)	
EXPIR	RATION DAT	E:, 20	
Financ	ce Authority (	issues this Irrevocable Standby Letter of Credit in favor of the Indiana "IFA"), for any sum or sums up to the aggregate amount of United States Dollars (US\$) t sight drawn on the Issuer. Any draft under this Letter of Credit shall.	
1.	Identify this	Irrevocable Standby Letter of Credit by the name of the Issuer, and the edit number, amount, and place and date of issue; and	
2.	State one of the following:		
	to perform End Crossin	ng is due to the failure of WVB East End Partners, LLC ("Developer") certain obligations under the certain Public-Private Agreement, Easting (Louisville-Southern Indiana Ohio River Bridges Project) between veloper dated as of December 27, 2012 (the "Agreement")."	
		or	

"This drawing is due to the failure of WVB East End Partners, LLC ("Developer") to deliver to IFA a new or replacement letter of credit, on the same terms, by the deadline set forth in the certain Public-Private Agreement, East End Crossing (Louisville-Southern Indiana Ohio River Bridges Project) between IFA and Developer dated as of December 27, 2012."

"This drawing is due to the fact that the Issuer does not meet the requirements set forth in the certain Public-Private Agreement, East End Crossing (Louisville-Southern Indiana Ohio River Bridges Project) between IFA and WVB East End Partners, LLC ("Developer") dated as of December 27, 2012 (the "Agreement") and Developer has failed to provide a substitute letter of credit issued by a qualified institution within the deadline set forth in the Agreement."

or

[Include another withdrawal condition if established under agreement or applicable law]."

All drafts will be honored if the original sight draft is physically presented to (United States Bank/Branch - Name & Address) on or before (Expiration Date) or any extended expiration date.

This Letter of Credit shall be automatically extended for successive periods of one year, without amendment, from the stated expiration date and each extended expiration date unless we send IFA written notice of our intent not to extend the credit; which notice must be sent at least 30 days prior to the expiration date of the original term hereof or any extended one year term, by registered or certified mail or overnight courier, to IFA at the address for IFA stated above or any other address specified in writing from an executive officer of IFA to the Issuer at the Issuer's address stated above.

This Letter of Credit is subject to the rules of the "International Standby Practices" ISP98. For matters not addressed by ISP98, this Letter of Credit shall be governed by New York law.

	•	
_		
Ву:		
	(Authorized Signature of Issuer	

lection

#### EXHIBIT 21

#### FORM OF DIRECT AGREEMENT

THIS DIRECT AG	REEMENT dated as	of [] (t)	nis "Direct Agreement"), is
made by and [between]/[ar	mong] the Indiana Fin	ance Authority, a bo	dy corporate and politic, noi
a state agency but an in	istrumentality exercis	ing essential public	functions, of the state of
Indiana ("IFA"), WVB E	East End Partners,	LLC, a Delaware	limited liability company
("Developer") [and] [	], a [	] ("Lender") [and	Lender's Collateral Agent or
Indenture Trustee], as I	rustee or Collatera	l Agent (in such	capacity, together with its
successors in such capaci	ty, the Collateral Ag	gent") [for Lender]] f	or the purpose of facilitating
Lender's financing or Refin	ancing of the East Er	nd Crossing (as such	term is defined below).

#### RECITALS

- A. IFA and Developer have entered into that Public-Private Agreement (the "PPA") for the East End Crossing (Louisville-Southern Indiana Ohio River Bridges East End Crossing) (the "East End Crossing"), which PPA contemplates Developer obtaining financing or Refinancing for the East End Crossing from third parties.
- B. In order to enable Developer, and to induce Lender, to provide certain financing or Refinancing necessary for the East End Crossing, Lender requires certain assurances from IFA regarding Lender's rights in the event of a default by Developer.
- C. IFA and Developer have previously set forth such assurances in the PPA for the benefit of Lender as an express third-party beneficiary thereof.
- D. In reliance on such assurances, and on this Direct Agreement, Lender has agreed to make available such financing or Refinancing facilities for the purpose of financing or Refinancing all or part of the East End Crossing.
- E. The execution of this Direct Agreement by IFA in favor of the Collateral Agent is a condition precedent to such financing or Refinancing facilities being made available to Developer by Lender.

**NOW, THEREFORE**, in consideration of the foregoing and the mutual terms and covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the parties, each of IFA, Developer[,]/[and] [Lender] Collateral Agent hereby agree as follows:

#### 1. DEFINITIONS AND INTERPRETATION

1.1 **Definitions**. Capitalized terms used and not otherwise defined and references used but not construed in this Direct Agreement have the respective meanings and constructions assigned to such terms in the PPA. In addition, the following terms have the meanings specified below:

Collateral Agent has the meaning given to it in the Preamble.

Cure Period means:

- (a) With respect to a Developer Default set forth in an IFA Notice that is curable by the payment of money to IFA, a period starting on the date of the receipt of such IFA Notice and ending 60 days after the later of (i) Lender's receipt of such IFA Notice or (ii) expiration of Developer's cure period (if any) under the PPA;
- (b) With respect to a Developer Default set forth in an IFA Notice other than Incurable Developer Defaults and those under <u>clauses (a)</u> above and <u>(c)</u> below, a period starting on the date of the receipt of such IFA Notice and ending 60 days after the later of (i) receipt of such IFA Notice or (ii) expiration of Developer's cure period (if any) under the PPA; and
- (c) With respect to a Developer Default set forth in an IFA Notice, other than Incurable Developer Defaults, that by its nature is not capable of cure unless and until the Step-in Party, the Collateral Agent or a court receiver has possession and control of the East End Crossing, a period starting on the date of the receipt of such IFA Notice and ending 180 days after the later of (i) receipt of such IFA Notice or (ii) expiration of Developer's cure period (if any) under the PPAprovided, however, that (i) during such cure period the Step-in Party cures all Developer Defaults which may be cured by the payment of money within the Cure Period under clause (a) above, (ii) during such cure period the Step-in Party cures all Developer Defaults governed by clause (b) above within the Cure Period available under clause (b) above, and (iii) within the later of (A) five days after expiration of Developer's cure period, if any, and (B) 30 days after the Collateral Agent receives such IFA Notice, the Step-in Party initiates and thereafter pursues with good faith, diligence and continuity lawful processes and steps to obtain possession and control of the East End Crossing. This Cure Period is subject to extension in accordance with Section 6.4 below.

Notwithstanding the foregoing, neither a Notice nor opportunity to cure shall be required for a Developer Default under <u>Sections 19.1.1.3(a)</u>, <u>19.1.1.16</u> or <u>19.1.1.17</u> of the PPA.

In no case, however, shall a Cure Period extend beyond the expiration of the Term.

**Default** means an Event of Default as defined in the Funding Agreement for any senior Project Debt or any event or circumstance specified in such Funding Agreement that would (with the expiration of a grace period, the giving of notice, the lapse of time, the making of any determination under the Funding Agreement or any combination of any of the foregoing) be an Event of Default.

Developer has the meaning given to it in the Preamble.

Direct Agreement has the meaning given to it in the Preamble.

Discharge Date means the date on which all of the obligations of Developer under all Funding Agreements have been irrevocably discharged in full to the satisfaction of the Collateral Agent.

East End Crossing has the meaning given to it in the Recitals.

**Event of Default** means an "Event of Default" (or its terminological equivalent) as defined in the Funding Agreement for senior Project Debt.

# Incurable Developer Default means:

- (a) A Developer Default under <u>Section 19.1.1.11</u> of the PPA (wrongful transfer of Developer's Interest; wrongful Equity Transfer or wrongful Change of Control);
- (b) A Developer Default under <u>Section 19.1.1.3(a)</u> of the PPA (missed Long Stop Date); and
- (c) A Developer Default under <u>Section 19.1.1.16</u> or <u>19.1.1.17</u> of the PPA (bankruptcy-type events).

IFA has the meaning given to it in the Preamble.

IFA Notice has the meaning given to it in Section 4.1 below.

Lender has the meaning given to it in the Preamble.

Lender Notice has the meaning given to it in Section 5.1 below.

PPA has the meaning given to it in the Recitals.

Revival Date has the meaning given to it in Section 12.1 below.

Step-in Date has the meaning given to it in Section 8 below.

Step-in Notice has the meaning given to it in Section 7.1 below.

Step-in Party has the meaning given to it in Section 7.2 below.

Step-in Period means the period from and including the Step-in Date until the earliest of:

- (a) The Substitution Effective Date;
- (b) The Step-out Date;
- (c) The date of termination of the PPA by IFA in accordance with the PPA and this Direct Agreement);
- (d) The date of the expiration or early termination of the Term under the PPA;
- (e) Expiration of the applicable Cure Period without cure of the Developer Default to which it relates, and
- (f) The date an Incurable Developer Default occurs.

provided, however, that if there occurs a preceding Incurable Developer Default, there shall be no Step-in Period.

Step-out Date means the effective date a Step-in Party designates for ceasing its step-in as set forth in any Step-out Notice served by the Step-in Party pursuant to Section 9 below.

Step-out Notice has the meaning given to it in Section 9 below.

Substituted Entity has the meaning given to it in the PPA.

Substitute Accession Agreement means the agreement to be entered into by a Substituted Entity pursuant to Section 11.1 below.

Substitution Effective Date has the meaning given to it in Section 11.1 below.

Substitution Notice has the meaning given to it in Section 10.1 below.

# 1.2 Interpretation

Unless the context otherwise clearly requires:

- (a) The definitions of terms herein shall apply equally to the singular and plural forms of the terms defined:
- (b) Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms;
- (c) The words "include", "includes" and "including" shall be deemed to be followed by the phrase "without limitation";
- (d) The word "will" shall be construed to have the same meaning and effect as the word "shall":
- (e) Any reference herein to any Person, or to any Person in a specified capacity, shall be construed to include such Person's successors and permitted assigns or such Person's successors in such capacity, as the case may be;
- (f) The words "herein", "hereof" and "hereunder", and words of similar import, shall be construed to refer to this Direct Agreement in its entirety and not to any particular provision hereof;
- (g) All references herein to Sections and Schedules shall be construed to refer to Sections of and Schedules to this Direct Agreement, unless otherwise specified herein. Any Schedules to this Direct Agreement are an integral part hereof. The provisions of this Direct Agreement shall prevail over the provisions of any Schedules to the extent of any inconsistency;
- (h) The headings used in this Direct Agreement are for convenience of reference only and are not to affect the construction of or to be taken into consideration in interpreting this Direct Agreement;
- (i) References herein to this Direct Agreement or to any other agreement or document relating to the East End Crossing includes a reference to this Direct Agreement, or, as the case may be, such other agreement or document as amended from time to time:
- (j) "Winding-up", "liquidation", "dissolution", "insolvency", "adjustment" or "reorganization" of a Person and references to the "liquidator", "assignee", "administrator", "receiver", "custodian", "conservator" "sequestrator" or

"trustee" of a Person shall be construed so as to include any equivalent or analogous proceedings or, as the case may be, insolvency representatives or officers under the law of the jurisdiction in which such Person is incorporated, organized or constituted or any jurisdiction in which such Person or, as the case may be, insolvency representative or officer carries on business including the seeking of winding up, liquidation, dissolution, reorganization, administration, arrangement, adjustment or relief of debtors; and

(k) Any definition or reference to any agreement, instrument or other document herein shall be construed as referring to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein or in such agreement, instrument or other document).

#### 2. REPRESENTATIONS AND WARRANTIES

- 2.1 IFA represents and warrants to the Collateral Agent that:
  - (a) Organization; Power and Authority. IFA is a body corporate and politic, not a state agency but an instrumentality exercising essential public functions, of the State of Indiana, and IFA has the power and authority to execute this Direct Agreement and the PPA, and to perform the provisions hereof and thereof.
  - (b) Authorizations, Enforceability. This Direct Agreement and the PPA have been duly authorized by IFA, and this Direct Agreement constitutes a legal, valid and binding obligation of IFA enforceable against IFA in accordance with its terms, except as such enforceability may be limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally and (ii) general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).
  - (c) **No Default.** There is no IFA Default, IFA is not aware of any Developer Default, and there exists no event or condition of which IFA is aware that would, with the giving of notice or passage of time or both, constitute such a Developer Default or IFA Default.
  - (d) Initial Funding Agreements. IFA acknowledges and agrees that the documents referred to in Schedule B attached hereto are deemed to constitute Initial Funding Agreements for purposes of the PPA.
  - (e) No Conflicts. The execution and delivery by IFA of this Direct Agreement, and the performance by IFA of its obligations hereunder, will not conflict with any Laws applicable to IFA that are valid and in effect on the date of execution and delivery.
  - (f) No Litigation. As of the date of the execution of this Direct Agreement, there is no action, suit, proceeding, investigation or litigation pending and served on IFA which challenges IFA's authority to execute, deliver or perform, or the validity or

enforceability of this Direct Agreement.

- (g) Compliance with Mandatory Requirements. The Funding Agreements comply with the provisions of Section 13.3 of the PPA.
- 2.2 Developer represents and warrants to IFA and the Collateral Agent that::
  - (a) Organization: Power and Authority. The Developer is a limited liability company duly organized validly existing and in good standing under the laws of the State of Delaware, is registered to transact business in the State of Indiana, and has all requisite power and authority to conduct, execute, deliver and perform its obligations under the PPA and this Direct Agreement.
  - (b) Authorization: No Conflicts. The execution, delivery and performance by the Developer of this Direct Agreement has been duly authorized by all necessary corporate action, and does not and will not (i) require any consent or approval of the Developer's board of directors, shareholders, members, or any other person or entity that has not been obtained, (ii) violate any provision of the Developer's organizational documents or any Law, order, writ, judgment, injunction, decree or award having applicability to the Developer, or (iii) result in a breach of or constitute a default under any agreement to which the Developer is a party.
  - (c) Enforceability. This Direct Agreement has been duly executed and delivered and constitutes the legal, valid and binding obligation of Assignor enforceable against Assignor in accordance with its terms, except as enforceability may be limited by general principles of equity and by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the rights of creditors generally.
  - (d) No Default. There is no Developer Default, the Developer is not aware of any IFA Default, and there exists no event or condition of which the Developer is aware that would, with the giving of notice or passage of time or both, constitute a Developer Default or an IFA Default.
  - (e) Purpose of Loan. The purposes of the Project Debt evidenced and secured by the Funding Agreements are solely to (a) fund Developer's costs of acquiring designing, permitting, building, constructing, improving, equipping, modifying, operating, maintaining, reconstructing, restoring, rehabilitating, renewing and replacing the East End Crossing, (b) fund reserves relating to the East End Crossing, and (c) pay closing costs with respect to the Initial East End Crossing Debt, financing costs and fees, the costs of financial advisors, technical advisors, legal advisors, and the collateral agent/trustee and interest costs.
  - (f) Initial Funding Agreements. Schedule B lists all the Initial Funding Agreements.
  - (g) Compliance with Mandatory Requirements. The Funding Agreement complies with the provisions of Section 13.3 of the PPA.

2.3	The C	ollateral Agent	represents	and warrants to	IFA and	Develope	r that:		
	(a)	The Collaters	ıl Agent is a	[	] duly c	organized,	validly	existing	and in

(b) This Direct Agreement has been duly executed and delivered and constitutes the legal, valid and binding obligation of the Collateral Agent enforceable again the Collateral Agent in accordance with its terms, except as enforceability may be limited by general principles of equity and by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the rights of creditors generally.

# 3. AGREEMENTS AND CONSENT TO SECURITY: NOTICES TO IFA

- 3.1 IFA acknowledges notice and receipt of the Funding Agreements, and, notwithstanding anything in the PPA to the contrary but in reliance on Developer's and Collateral Agent's representations and warranties, consents to the assignment by Developer to the Collateral Agent of all of Developer's Interests pursuant to the terms and provisions of, the Security Documents.
- 3.2 If the Security Documents listed in Schedule B include a pledge of equity interests in Developer held by initial Equity Members, IFA acknowledges notice and receipt of such Security Documents, and in reliance on Developer's and Collateral Agent's representations and warranties, consents to the granting by each of the initial Equity Members to the Collateral Agent of a security interest in such equity interests in Developer pursuant to the terms and provisions of such Security Documents.
- 3.3 In reliance on Developer's and Collateral Agent's representations and warranties, IFA agrees that the assignment of, and the grant of the security interest in and first lien over, all of the Developer's Interest pursuant to the Security Documents, the grant of the security interest by each initial Equity Member in its equity interests in Developer pursuant to the Security Documents, the execution by Developer and IFA of this Direct Agreement and the performance of their respective obligations hereunder and the enforcement by the Collateral Agent of its rights under the Security Documents, in each case, shall neither constitute a Developer Default, Default Termination Event or any other breach by Developer of the PPA Documents nor would, with the giving of notice or lapse of time or both, constitute a Developer Default, Default Termination Event or any other breach by Developer of the PPA Documents, nor require the consent of IFA, other than as provided herein.
- 3.4 Collateral Agent shall deliver to IFA together with delivery to Developer or any other Person, every notice of election to sell, notice of sale or other notice under any requirement of Law or of any Funding Agreement in connection with the exercise of remedies under this Direct Agreement or any other Funding Agreement. The Collateral Agent agrees to be bound by the provisions of Section 13.3.7 of the PPA.
- 3.5 IFA acknowledges and confirms that the Funding Agreements and Security Documents do not conflict with any of the terms, conditions, or restrictions contained in <u>Section 13.3</u> of the PPA.

#### 4. IFA NOTICE OF TERMINATION AND EXERCISE OF REMEDIES

4.1 Except as provided otherwise in Section 12.2 below, IFA shall give the Collateral Agent

written notice (an "IFA Notice") promptly upon giving Notice to Developer of:

- (a) A Developer Default (other than an Incurable Developer Default under clause (c) of the definition thereof);
- (b) IFA's right to terminate, or IFA's election to terminate, the PPA under Sections 19.2 and 20.3 of the PPA:
- (c) IFA's exercise of any rights under <u>Sections 19.2.3</u> (except under <u>19.2.3.5</u>), 19.2.4 or 19.2.8.1 of the PPA; or
- (d) IFA's right to suspend its performance (including in connection with any insolvency or bankruptcy proceeding in relation to Developer) under the PPA.
- 4.2 An IFA Notice shall specify:
  - (a) The unperformed obligations of Developer under the PPA that are the grounds for termination of the PPA, or for suspension of performance or for exercise of the other rights all as referred to in <u>Sections 19.2.8.1</u>, <u>19.2.3</u> (except <u>19.2.3.5</u>), <u>19.2.4</u> and <u>19.2.1</u> of the PPA in detail sufficient to enable the Collateral Agent to assess the scope and amount of any liability of Developer resulting therefrom;
  - (b) To the extent known to IFA, all amounts due and payable by Developer to IFA under the PPA on or before the date of such IFA Notice and which remain tinpaid at such date and the nature of Developer's obligation to pay such amounts; and
  - (c) The estimated amount of Developer's payment obligation to IFA that IFA reasonably foresees will arise during the applicable Cure Period.
- **4.3** Upon the Collateral Agent's request made not more frequently than monthly, IFA shall update the statements and information in its IFA Notice.
- **4.4** Following receipt of an IFA Notice, the Collateral Agent shall have the rights set forth in Section 6.2 and the right to deliver to IFA a Step-in Notice as provided in Section 7 below.

## 5. LENDER NOTICE: PAYMENTS TO COLLATERAL AGENT

- **5.1** The Collateral Agent shall give IFA written notice (a "Lender Notice"), with a copy to Developer, promptly upon the occurrence of any Default or Event of Default (whether or not an IFA Notice has been served relating to the same event).
- 5.2 The Collateral Agent shall specify in any Lender Notice the circumstances and nature of the Default or Event of Default to which the Lender Notice relates.
- 5.3 IFA shall, following receipt of a Lender Notice relating to an Event of Default and until further notification from the Collateral Agent, pay to an account designated by the Collateral Agent in the Lender Notice any payments required to be made by IFA to Developer under the PPA including any termination compensation required to be paid to Developer under the PPA.

but subject to all rights, defenses, adjustments, deductions and offset respecting payment available to IFA under the PPA. The Collateral Agent shall provide to IFA the following information: (a) the individual responsible for administering the account, including his or her position; (b) the mailing address of such individual; and (c) the telephone, fax and e-mail address of such individual.

- 5.4 All sums paid as provided in <u>Section 5.3</u> above shall be deemed paid to Developer under the PPA. IFA shall have no liability, whatsoever, for any delay in processing any payment request pursuant to <u>Section 5.3</u> above, provided that such delay does not extend 14 Business Days beyond the date of IFA's certified, return-receipt or registered mail receipt of the Lender Notice. In no event shall any payment be due to the Collateral Agent earlier than it is due under the PPA
- 5.5 Developer and the Collateral Agent agree that any payment made in accordance with Section 5.3 above shall constitute a complete discharge of IFA's relevant payment obligations to Developer. IFA shall have the unconditional right to rely upon any Lender Notice purported to be signed and delivered by or for the Collateral Agent, without IFA obligation or liability to ascertain or investigate its authenticity, truth or accuracy.
- 5.6 The Collateral Agent shall promptly provide Notice to IFA of any decision to accelerate amounts outstanding under the Funding Agreements or to exercise any enforcement remedies under the Funding Agreements.
- 5.7 The Collateral Agent's or Lender's exercise of any right it may have pursuant to the Security Documents to assign, transfer or otherwise dispose of any right, title or interest it may have in, or obligations it may have pursuant to, the Security Documents shall be subject to compliance with the requirements of <a href="Section 13.4">Section 13.4</a> of the PPA to the extent such exercise of rights would constitute a Refinancing.

# 6. LIMITATIONS ON IFA REMEDIES DURING CURE PERIOD; CURE PERIOD EXTENSION

6.1 Prior to the expiration of any applicable Cure Period (except if there exists an Incurable Developer Default) and provided IFA has given an IFA Notice relating to a Developer Default if required under this Direct Agreement, IFA agrees not to terminate the PPA under Section 20.3 of the PPA or take or support any legal action for the liquidation, bankruptcy, administration, receivership, reorganization, dissolution or winding up of Developer or for the composition or readjustment of Developer's debts, or any similar insolvency procedure in relation to Developer, or for the appointment of a receiver, trustee, custodian, sequestrator, conservator, liquidator, administrator or similar official for Developer or for any part of Developer's Interest; provided that IFA shall not be prevented from (i) taking any such action on a Revival Date in respect of any prior Developer Default, or (ii) exercising any other rights and remedies available to IFA under the PPA Documents with respect to the subject Developer Default or any other breach by the Developer of the PPA Documents.

#### 6.2 If:

- (a) IFA exercises any step-in rights under <u>Section 19.2.4</u> or suspension rights under <u>Section 19.2.8.1</u> of the PPA,
- (b) The Collateral Agent delivers a Step-in Notice; and

(c) There does not exist and does not occur any Incurable Developer Default;

then, IFA shall cease exercising its step-in and suspension rights at such time as:

- The Step-in Party obtains possession or control of the East End Crossing from Developer;
- (ii) The Collateral Agent notifies IFA that the Step-in Party stands ready to immediately commence good faith, diligent curative action; and
- (iii) IFA is fully reimbursed for IFA's Recoverable Costs in connection with IFA's performance of any act or Work authorized by Section 19.2.4 of the PPA
- 6.3 Except if there exists an Incurable Developer Default, during any Cure Period, without giving a Step-in Notice, the Collateral Agent shall have the right (but shall have no obligation), at its sole option and discretion, to perform or arrange for the performance of any act, duty, or obligation required of Developer under the PPA, or to cure any default of Developer thereunder at any time (whether or not a Default Termination Event has occurred or been declared), which performance by the Collateral Agent shall be accepted by IFA in lieu of performance by Developer and in satisfaction of Developer's obligations under the PPA. To the extent that any default of Developer under the PPA is cured and/or any payment liabilities or performance obligations of Developer are performed by the Collateral Agent during the Cure Period, such action shall discharge the relevant liabilities or obligations of Developer to IFA.
- 6.4 If the Collateral Agent or another Step-in Party (i) shall have succeeded to the Developer's Interest and obtained possession in accordance with the terms of this Direct Agreement, (ii) shall have delivered to IFA within 15 days after obtaining possession and control a Substitute Accession Agreement in accordance with Section 11 below, and (iii) shall have thereafter diligently and with continuity cured all Developer Defaults which are capable of being cured through possession, then the Collateral Agent or other Step-in Party shall have time after it obtains possession as may be necessary with exercise of good faith, diligence and continuity to cure such Developer Default or perform such condition, in any event not to exceed 120 days after the date it obtains possession, and the Cure Period shall be extended accordingly; provided that in no event shall the Term be extended.

#### 7. STEP-IN NOTICE

- 7.1 Upon the issuance of a Lender Notice or an IFA Notice, except for an Incurable Developer Default, the Collateral Agent may give a written notice (a "Step-in Notice") under this Section 7 to IFA at any time during the Cure Period in the case of the issuance of an IFA Notice or at any time following the receipt by IFA of a Lender Notice.
- 7.2 The Collateral Agent shall nominate, in the Step-in Notice, (a) the Collateral Agent, a Lender or any entity that is wholly owned by a Lender or group of Lenders; or (b) any Person approved by IFA as a Substituted Entity in accordance with Section 21.6 of the PPA and Section 10 below, and the person so nominated being referred to as the "Step-in Party."
- 7.3 IFA shall have the unconditional right to rely upon any Step-in Notice purported to be signed and delivered by or for the Collateral Agent, without IFA obligation or liability to ascertain or investigate its authenticity, truth or accuracy.

#### RIGHTS AND OBLIGATIONS ON STEP-IN

- **8.1** On and from the date of the receipt of the Step-in Notice and the approval of IFA to the appointment of the Step-in Party if required by <u>Section 7.2</u> above ("Step-in Date") and during the Step-in Period, the Step-in Party shall be entitled to exercise and enjoy the rights and powers expressed to be assumed by or granted to a Step-in Party under this Direct Agreement.
- **8.2** Without prejudice to <u>Section 12</u> below (Revival of Remedies), unless there exists an Incurable Developer Default, from and after commencement of any applicable Cure Period and during the applicable Step-in Period, IFA shall:
  - (a) Not terminate or give Notice terminating the PPA under <u>Sections 19.2 or 20.3</u> (Termination for Developer Default) of the PPA unless such Cure Period shall expire without cure of the Developer Default to which it relates or the grounds for termination or giving notice of termination or otherwise exercising its rights under <u>Section 20.3</u> of the PPA in accordance with such section are a subsequent Developer Default, subject to the Cure Period applicable to such subsequent Developer Default;
  - (b) Not suspend its performance (including in connection with any insolvency, bankruptcy or similar proceeding in relation to Developer) under the PPA, unless such Cure Period shall expire without cure of the Developer Default to which it relates or the grounds for suspension of performance are failure by the Step-in Party to perform Developer's obligations under the PPA (other than the Developer Default to which such Cure Period relates), subject to the Cure Period applicable to such failure, or unless the PPA has been rejected;
  - (c) Not take or support any action for the liquidation, bankruptcy, administration, receivership, reorganization, dissolution or winding up of Developer or for the composition or readjustment of Developer's debts, or any similar insolvency procedure in relation to Developer, or for the appointment of a receiver, trustee, custodian, sequestrator, conservator, liquidator, administrator or similar official for Developer or for any part of Developer's Interest;
  - (d) Continue to make payments pursuant to Section 5.3 above; and
  - (e) Endorse over as may be directed by the Collateral Agent any checks received by IFA with respect to the Performance Security if, in each case, such security is in the form of a surety bond; provided that the Collateral Agent reimburse IFA for any Losses incurred by IFA in attempting to cure the Developer Default as and to the extent: (i) IFA is entitled to such reimbursement pursuant to the PPA; (ii) IFA has promptly notified the Collateral Agent of such Losses at or prior to the time of endorsement and (iii) the Collateral Agent's obligation to reimburse IFA for such Losses do not exceed the proceeds from any such security.
- 8.3 IFA, Collateral Agent and Developer agree that:
  - (a) The performance by IFA in favor of either the Step-in Party or Developer shall be a good and effective discharge of IFA's obligations under this Direct Agreement and the PPA;

- (b) IFA's receipt of performance from either the Step-in Party or Developer shall be a good and effective discharge of Developer's corresponding obligations under the PPA;
- (c) The Collateral Agent shall be entitled at any time by Notice to IFA to direct (such direction being binding on the Collateral Agent, IFA and Developer) that, at all times during the Step-in Period, the Step-in Party shall be solely entitled to make any decisions, to give any directions, approvals or consents, to receive any payments or otherwise to deal with IFA under the PPA. IFA shall be entitled to conclusively rely on any such decisions, directions, approvals or consents, without any duty whatsoever to ascertain or investigate the validity thereof, and any such decisions, directions, approvals or consents shall be as binding on Developer as if made or given by Developer itself;
- (d) Any amount due from Developer to IFA under the PPA or this Direct Agreement as of the Step-in Date and notified to such Step-in Party prior to the Step-in Date shall be paid to IFA on the Step-in Date, failing which IFA shall be entitled to exercise its rights under the PPA in respect of the amount so due and unpaid; and
- (e) Developer shall not be relieved from any of its obligations under the PPA, whether arising before or after the Step-in Date, by reason of the Step-in Party exercising the rights provided herein, except to the extent provided in <u>Section 6.3</u> above and <u>Section 9</u> below.

#### STEP-OUT

A Step-in Party may, at any time, by giving not less than 30 days' prior written notice ("Step-out Notice") to IFA, terminate its obligations to IFA under this Direct Agreement respecting the event giving rise to the Step-in Notice, in which event such Step-in Party shall be released from all obligations under this Direct Agreement respecting the event giving rise to the Step-in Notice, except for any obligation or liability of the Step-in Party arising on or before the effective date set forth in the Step-out Notice. The obligations of IFA to the Step-in Party under this Direct Agreement respecting the event giving rise to the Step-in Notice shall also terminate upon the effective date set forth in the Step-out Notice. If the Step-in Party giving the Step-out Notice is a Substituted Entity that is not a Lender, then such Step-in Party shall be released from all obligations under this Direct Agreement arising from and after the effective date contained in the Step-out Notice and its relinquishment of possession and control of the East End Crossing.

# 10. SUBSTITUTION PROPOSAL BY THE LENDERS

- **10.1** The Collateral Agent may give a notice ("Substitution Notice") under this <u>Section 10</u> in writing to IFA at any time:
  - (a) During any Cure Period;
  - (b) During any Step-in Period; or
  - (c) After delivery of a Lender Notice.
- 10.2 In any Substitution Notice, the Collateral Agent shall provide Notice to IFA that it intends

to designate a Substituted Entity.

- 10.3 The Collateral Agent shall, as soon as practicable, provide to IFA the information, evidence and supporting documentation regarding the proposed Substituted Entity and any third party entering into a material subcontract with such Substituted Entity, including:
  - (a) The name and address of the proposed Substituted Entity and its proposed Key Contractors:
  - (b) The names of the proposed Substituted Entity's shareholders or members and the share capital or partnership or membership interests, as the case may be, held by each of them:
  - (c) The manner in which it is proposed to finance the proposed Substituted Entity in its performance of the balance of the Work and the extent to which such financing is committed;
  - (d) Copies of the proposed Substituted Entity and its proposed Key Contractors' most recent financial statements (and if available such financial statements shall be for the last three financial years) or in the case of a newly-formed special purpose company its opening balance sheet;
  - (e) A copy of the proposed Substituted Entity's and its proposed Key Contractors' formation documents, and other evidence of each of their organization and authority, including organizational documents, resolutions and incumbency certificates:
  - (f) Details of the resources available to the proposed Substituted Entity and its proposed Key Contractors, and the appropriate qualifications, experience and technical competence available to the proposed Substituted Entity and its proposed Key Contractors to enable the proposed Substituted Entity to perform the obligations of Developer under the PPA;
  - (g) The names of the proposed Substituted Entity's and its proposed Key Contractors' directors/managers/members and any key personnel who will assume substantially-similar roles as the Key Personnel and otherwise have responsibility for the day-to-day management of its participation in the East End Crossing;
  - (h) Disclosure of any actual or potential conflicts of interest of the proposed Substituted Entity and its proposed Key Contractors; and
  - (i) All certificates, including certificates regarding debarment or suspension, forms, statements, representations and warranties and opinion(s) of counsel that IFA may reasonably request, signed by the proposed Substituted Entity and, where applicable, proposed Key Contractors, in each case not at IFA's cost or expense.
- 10.4 IFA shall not be required to give its approval to the proposed Substituted Entity it:
  - (a) There are unremedied breaches under the PPA and there is no rectification plan reasonably acceptable to IFA with respect to the breaches which are capable of

being cured by the Substituted Entity; or

- (b) Any proposed security interests to be granted by the proposed Substituted Entity to the Collateral Agent and/or Lender in addition to (or substantially different from) the security interests granted to the Collateral Agent and/or Lender under the Initial Funding Agreements or Initial Security Documents materially and adversely affect the ability of the Substituted Entity to perform Developer's obligations under the PPA Documents or have the effect of increasing any liability of IFA, whether actual or potential (unless a Rescue Refinancing is concurrently proposed, in which case the Project Debt Termination Amount may increase by up to 10%).
- 10.5 If IFA fails to give its approval within 45 days of the date on which IFA has confirmed it has received the information specified in <u>Section 10.3</u> above in respect of any proposed Substituted Entity, or any extension thereof by mutual agreement of IFA and the Collateral Agent, then the approval of IFA shall be deemed to have been given.

#### 11. SUBSTITUTION

11.1 If IFA approves (or is deemed to have approved) a Substitution Notice pursuant to Section 10 above, then the Substituted Entity named therein shall execute a duly completed Substitute Accession Agreement substantially in the form attached hereto as Schedule A and submit it to IFA (with a copy thereof to the other parties to this Direct Agreement). The assignment set forth in the Substitute Accession Agreement shall become effective on and from the date on which (a) the Collateral Agent or the Substituted Entity lawfully succeeds to all the Developer's Interest through exercise of foreclosure rights and actions on security interests or through transfer from Developer in lieu of foreclosure, (b) IFA receives all payments described in Section 11.4 below and (c) IFA countersigns the Substitute Accession Agreement (the "Substitution Effective Date"), or the date that is ten days after the date IFA receives the completed Substitute Accession Agreement if IFA fails to sign the Substitute Accession Agreement.

#### 11.2 As of the Substitution Effective Date:

- (a) Such Substituted Entity shall become a party to the PPA Documents and this Direct Agreement in place of Developer;
- (b) All of Developer's obligations and liabilities under the PPA Documents and under this Direct Agreement arising from and after the Substitution Effective Date shall be immediately and automatically transferred to the Substituted Entity, without release of Developer from any such obligations and liabilities to IFA. Notwithstanding the foreclosure or other enforcement of any security interest created or perfected by any Funding Agreement, and notwithstanding occurrence of the Substitution Date, Developer shall remain liable to IFA for the payment of all sums owing to IFA under the PPA and for the performance and observance of all of Developer's covenants and obligations under the PPA;
- (c) Such Substituted Entity shall exercise and enjoy the rights and perform the obligations of Developer under the PPA Documents and this Direct Agreement, and

- (d) IFA shall owe its obligations (including any undischarged liability with respect to any loss or damage suffered or incurred by Developer prior to the Substitution Effective Date) under the PPA Documents and this Direct Agreement to such Substituted Entity in place of Developer, subject to IFA's right to offset any losses or damages suffered or incurred by IFA as provided under the PPA, which when such obligations are performed by IFA shall be, and be deemed to be, a release by Developer of its entitlement to such performance.
- 11.3 IFA shall use its reasonable efforts to facilitate the transfer to the Substituted Entity of Developer's obligations under the PPA and this Direct Agreement.
- 11.4 The Substituted Entity shall pay to IFA on the Substitution Effective Date any amount due to IFA under the PPA and this Direct Agreement, including IFA's reasonable costs and expenses incurred in connection with (a) Developer's default and termination, (b) IFA's activities with respect to the East End Crossing during any period IFA was in possession of the East End Crossing, and (c) the approval of the Substituted Entity, all as of the Substitution Effective Date and notified to such Substituted Entity prior to the Substitution Effective Date. IFA's receipt of the payment pursuant to this Section 11.4 shall be a condition precedent to the Substitution Effective Date.
- 11.5 The occurrence of the Substitution Effective Date shall not extinguish prior Developer Defaults that remain uncured, and IFA shall continue to have all rights and remedies available under the PPA with respect to such Developer Defaults, including any applicable termination rights, subject to (a) the limitations on IFA's exercise of such rights and remedies set forth in this Direct Agreement during any applicable Cure Period that continues after the Substitution Effective Date (b) the limitations on termination due to accumulation of Noncompliance Points prior to the Substitution Effective Date to the extent provided in Section 21.4.5 of the Agreement and (c) Section 13 below.
- 11.6 As of the Substitute Effective Date, IFA shall enter into an equivalent direct agreement on substantially the same terms as this Direct Agreement, save that Developer shall be replaced as a party by the Substituted Entity.
- 12. REVIVAL OF REMEDIES; INCURABLE DEVELOPER DEFAULT
- 12.1 If:
  - (a) An IFA Notice has been given:
  - (b) The grounds for such IFA Notice are continuing and have not been remedied or waived; and
  - (c) The Step-in Period ends without cure of the Developer Defaults that were the subject of IFA Notice.

Then, from and after the date such Step-in Period expires (the "Revival Date"), IFA shall be entitled:

(i) Except as provided otherwise in <u>Section 6.4</u> above, to act upon any and all grounds for termination or suspension available to it in relation to the PPA in respect of defaults under the PPA not remedied or waived;

- (ii) To pursue any and all claims and exercise any and all remedies against Developer; and
- (iii) To take or support any action of the type referred to in <u>Section 20.7</u> of the PPA if and to the extent that it is then entitled to do so under the PPA.
- **12.2** IFA may terminate the PPA without providing an IFA Notice, Step-in Period or Cure Period to the Collateral Agent in the event of an Incurable Developer Default. Upon the occurrence of an Incurable Developer Default, IFA's termination and suspension rights shall be effective without regard to any limitations set forth in this Direct Agreement, subject to and except to the extent provided otherwise in <u>Section 13</u> below.

#### 13. NEW AGREEMENTS

- 13.1 The provisions of this Section 13 shall apply only if:
  - (a) There occurs an incurable Developer Default under <u>clause (a)</u> or <u>(c)</u> of the definition of incurable Developer Default; or
  - (b) (i) there occurs a Developer Default governed by <u>clause (c)</u> of the definition of Cure Period, (ii) the Collateral Agent pursues with good faith, diligence and continuity lawful processes and steps to obtain the appointment of a court receiver for the East End Crossing and possession, custody and control of the East End Crossing, (iii) despite such efforts the Collateral Agent is unable to obtain such possession, custody and control of the East End Crossing within the 180-day Cure Period set forth in <u>clause (c)</u> of the definition of Cure Period and (iv) no Step-out Notice has been given.
- 13.2 If this Section 13 is applicable and either (i) IFA terminates the PPA or (ii) IFA receives notice that the PPA is otherwise terminated, rejected, invalidated or rendered null and void by order of a bankruptcy court, then (a) IFA shall deliver to the Collateral Agent Notice of such event, and (b) the Collateral Agent or other Step-in Party, to the extent then permitted by Law, shall have the option to obtain from IFA agreements to replace the PPA Documents, and, to the extent necessary, new ancillary agreements (e.g. escrow agreements) (together the "New Agreements") in accordance with and upon the terms and conditions of this Section 13.
- 13.3 In order to exercise such option, the Collateral Agent or other Step-in Party must deliver to IFA, within 60 days after IFA delivers its Notice of termination. (a) a request for New Agreements, (b) a written commitment that the Collateral Agent or other Step-in Party will enter into the New Agreements and pay all the amounts described in Sections 13.5(a) and (c) below, and (c) originals of such New Agreements, duly executed and acknowledged by the Collateral Agent or other Step-in Party. If any of the foregoing is not delivered within such 60-day period, the option in favor of the Collateral Agent and all other Step-in Parties shall automatically expire.
- **13.4** Within 30 days after timely receipt of the Notice, written commitment and New Agreements duly executed, IFA shall enter into the New Agreements to which IFA is a party with the Collateral Agent or other Step-in Party, subject to any extension of such 30-day period as IFA deems necessary to clear any claims of Developer to continued rights and possession.
- 13.5 Upon the execution by all parties and as conditions to the effectiveness of the New Agreements, the Collateral Agent or other Step-in Party shall perform all of the following:

- (a) Pay to IFA:
  - (i) Any and all sums which would, at the time of the execution of the New Agreements, be due under the PPA Documents but for such termination; and
  - (ii) The amount of any Termination Compensation previously paid by IFA under the PPA, with interest thereon at a floating rate equal to the LIBOR in effect from time to time plus 200 basis points from the date the termination compensation was paid until so reimbursed;
- (b) Otherwise fully remedy any existing Developer Defaults under the PPA Documents (provided, however, that Incurable Developer Defaults need not be remedied and with respect to any Developer Default which cannot be cured until the Collateral Agent or other Step-in Party obtains possession, it shall have such time, after it obtains possession, as is necessary with the exercise of good faith, diligence and continuity to cure such default, in any event not to exceed 120 days after the date it obtains possession);
- (c) Without duplication of amounts previously paid by Developer, pay to IFA all reasonable costs and expenses, including IFA's Recoverable Costs, incurred by IFA in connection with (i) such default and termination, (ii) the assertion of rights, interests and defenses in any bankruptcy or related proceeding, (iii) the recovery of possession of the East End Crossing, (iv) all IFA activities during its period of possession of, and respecting, the East End Crossing, including permitting, design, acquisition, construction, equipping, maintenance, operation and management activities, minus the lesser of (A) the foregoing clause (iv) amount and (B) the amount of Availability Payments, if any, that would have been paid during such period had the PPA not been terminated and had there been no adjustments to such Availability Payments, and (v) the preparation, execution, and delivery of such New Agreements. Upon request of the Collateral Agent or other Step-in Party, IFA will provide a written, documented statement of such costs and expenses; and
- (d) Deliver to IFA a new Payment Bond and Performance Security and new letters of credit and guarantees to the extent then required under the PPA.
- 13.6 Upon execution of the New Agreements and payment of all sums due IFA, IFA shall:
  - (a) Assign and deliver to the Collateral Agent or other Step-in Party, without warranty or representation, all the property, contracts, documents and information that Developer may have assigned and delivered to IFA upon termination of the PPA; and
  - (b) If applicable, transfer into a new Handback Requirements Reserve Account established by the Collateral Agent or other Step-in Party in accordance with the PPA, all funds IFA received from the Handback Requirements Reserve Account pursuant to <u>Section 6.13.3</u> of the PPA (or from draw on a Handback Requirements Letter of Credit) less so much thereof that IFA spent or is entitled to as reimbursement for costs of Rehabilitation Work IFA performed prior to the effectiveness of the New Agreements.

- 13.7 The New Agreements shall be effective as of the date of termination of the PPA and shall run for the remainder of the Term. The New Agreements shall otherwise contain the same covenants, terms and conditions and limitations as the PPA Documents and ancillary agreements and documents that were binding on IFA and Developer (except for any requirements which have been fulfilled by Developer prior to termination and except that Section 18.1 of the PPA (and any equivalent provisions of the other PPA Documents) shall be revised to be particular to the Collateral Agent or other Step-in Party).
- 13.8 If the holders of more than one Security Document make written requests upon IFA for New Agreements in accordance with this <u>Section 13</u>, IFA shall grant the New Agreements to, as applicable, the holder whose Security Documents have the most senior priority of record. Priority shall be established as follows.
  - (a) IFA shall submit a written request to the Collateral Agent to designate the Security Documents having the most senior priority of record. IFA shall have the right to conclusively rely on the Collateral Agent's written designation, without duty of further inquiry by IFA and without liability to any Lender; and thereupon the written requests of each holder of any other Security Document shall be deemed to be void.
  - (b) If IFA does not receive the Collateral Agent's written designation within ten days after delivering written request, then IFA may conclusively rely, without further inquiry and without liability to any Lender, on the seniority indicated by a thencurrent title report that IFA obtains from one of the four largest title insurance companies doing business in the State of Indiana (unless otherwise agreed in writing by the most senior holder so indicated); and thereupon the written requests of each holder of any other Security Document shall be deemed to be void.
  - (c) If the holders of more than one Security Document share pari passu senior lien priority as indicated pursuant to clause (a) or (b) above and make written requests upon IFA for New Agreements in accordance with this Section 13, IFA shall grant the New Agreement to such holders jointly (unless otherwise agreed in writing by such holders); and thereupon the written requests of each holder of any other Security Documents shall be deemed to be void.

# 14 GENERAL

- 14.1 Neither Lender nor the Collateral Agent shall have any obligation hereunder to extend credit to IFA or any contractor to IFA at any time, for any purpose.
- 14.2 For so long as any amount under the Funding Agreements is outstanding, IFA shall not, without the prior written consent of the Collateral Agent, consent to any assignment, transfer, pledge or hypothecation of the PPA or any interest therein by Developer, other than as specified in the PPA or this Direct Agreement.
- 14.3 Notwithstanding anything to the contrary contained herein, the Collateral Agent is acting hereunder, not in its individual capacity but solely as collateral agent, on behalf of the secured parties identified in the Security Documents. The Collateral Agent shall not be required to take any action whatsoever hereunder unless and until it is specifically directed to do so in writing as specified in the Security Documents. The Collateral Agent shall not be liable for acting in

accordance with such directions or for failing to act if it does receive any such written directions. Under no circumstances (other than in respect of gross negligence or willful misconduct of the Collateral Agent) shall the Collateral Agent be liable for any and all claims, liabilities, obligations, losses, damages, penalties, costs and expenses that may be imposed on, incurred by, or asserted against the Collateral Agent at any time or in any way relating to or arising out of the execution, delivery and performance of this Direct Agreement by the Collateral Agent. Under no circumstances shall the Collateral Agent be liable for any indirect, special, consequential or punitive damages for any action it takes pursuant to the authority or directions given under the Security Documents. For the avoidance of doubt, under no circumstances shall the Collateral Agent be required to perform any activity related to the construction of the East End Crossing including, without limitation, directing or supervising any portion of the construction of the East End Crossing. Nothing contained herein shall require the Collateral Agent to advance or risk its own funds.

#### 15. TERMINATION

This Direct Agreement shall remain in effect until the earlier to occur of (a) the Discharge Date; (b) the time at which all of IFA's obligations and liabilities have expired or have been satisfied in accordance with the terms of the PPA Documents and this Direct Agreement; and (c) any assignment to a Substituted Entity has occurred under <u>Section 11</u> above and IFA shall have entered into an equivalent direct agreement on substantially the same terms as this Direct Agreement, save that Developer has been replaced as a party by the Substituted Entity.

#### 16. EFFECT OF BREACH

Without prejudice to any rights a party may otherwise have, a breach of this Direct Agreement shall not of itself give rise to a right to terminate the PPA.

#### 17. NO PARTNERSHIP

Nothing contained in this Direct Agreement shall be deemed to constitute a partnership between the parties hereto. None of the parties shall hold itself out contrary to the terms of this <u>Section</u> 17.

## 18. REMEDIES CUMULATIVE

No failure or delay by IFA, Lender or the Collateral Agent (or their designee) in exercising any right or power hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such a right or power, preclude any other or further exercise thereof or the exercise of any other right or power. The remedies provided herein are cumulative and not exclusive of any remedies provided by law and may be exercised by Lender, the Collateral Agent or any designee, transferee or permitted assignee thereof from time to time.

#### 19. AMENDMENT AND WAIVER

No amendment, modification or waiver of any provision of this Direct Agreement shall be effective against any party hereto unless the same shall be in writing and signed by the party against whom enforcement is sought, and then such amendment, modification or waiver shall be effective only in the specific instance and for the specific purpose for which it was given.

#### 20. SUCCESSORS AND ASSIGNS

- 20.1 No party to this Direct Agreement may assign or transfer any part of its rights or obligations hereunder without the consent of the other parties, save that (a) the Collateral Agent may assign or transfer its rights and obligations hereunder to a successor Collateral Agent in accordance with the Funding Agreements, and (b) IFA may assign or transfer its rights and obligations hereunder as provided in Section 22.4.1 of the PPA.
- 20.2 This Direct Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns.

#### COUNTERPARTS

This Direct Agreement may be executed in any number of counterparts, each of which shall be identical and all of which, taken together, shall constitute one and the same instrument, and the parties may execute this Direct Agreement by signing any such counterpart. Transmission by facsimile or electronic ("e-mail") delivery of an executed counterpart of this Direct Agreement shall be deemed to constitute due and sufficient delivery of such counterpart, to be followed thereafter by an original of such counterpart.

# 22. SEVERABILITY

If, at any time, any provision of this Direct Agreement is or becomes illegal, invalid or unenforceable, neither the legality, validity or enforceability of the remaining provisions nor the legality, validity or enforceability of such provision will in any way be affected or impaired. The illegal, invalid or unenforceable provision shall be deemed replaced by such provisions as shall be legal, valid and enforceable in the relevant jurisdiction.

#### 23. NOTICES

23.1 Any notice, approval, election, demand, direction, consent, designation, request, agreement, instrument, certificate, report or other communication required or permitted to be given or made under this Direct Agreement (each, a "Notice") to a party must be given in writing (including by fax or electronic mail). All Notices will be validly given if on a Business Day to each party at the following address:

To IFA:

Public Finance Director Indiana Finance Authority One North Capitol, Suite 900 Indianapolis, IN 46204 Telephone. (317) 233-4332 Fax: (317) 232-6786 E-mail: ifa@ifa.in.gov

with copy to:

General Counsel Indiana Finance Authority One North Capitol, Suite 900 Indianapolis, IN 46204 Telephone. (317) 233-4332 Fax: (317) 232-6786 E-mail: ifa@ifa.in.gov

To De	veloper	:
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WVB East End Partners, LLC 1260 East Summit Street Crown Point, Indiana 46307 Attention: Sidney Florey Telephone: (407) 470-6639

Fax: (646) 400-5868

E-mail: sidney.florey@vinci.com

with copies to:

WI East End, LLC c/o The Walsh Group 929 W. Adams Street Chicago, Illinois 60607

Attention: Gregory Ciambrone Telephone: (312) 563-5471

Fax: (312) 563-5442

E-mail: gciambrone@walshgroup.com

and

Vinci Concessions Investments USA Inc.

c/o Vinci Concessions S.A.S.

9 Place de l'Europe

92851 Rueil-Malmaison, France

Attention: Fadi Selwan

Telephone: 33 1 47 16 32 33

Fax: 33 1 47 16 36 36

E-mail: fadi.selwan@vinci.com

and

Bilfinger East End Holdings Inc.

c/o Bilfinger Project Investments North America

Inc.

675 Cochrane Drive West Tower, Suite 630

Markham, ON (Canada) L3R 0B8

Attention: Damian Joy Telephone: (905) 752-3134

Fax: (905) 530-2214

E-mail: damian.joy@pi.bilfinger.ca

To the Collateral Agent:

[Collateral Agent's name]

[Office or department (e.g., Corporate Trust

Administration)]
[Street number]
[City, State, zip code]
Telephone: [\_\_\_\_\_]
Fax: [\_\_\_\_\_]
E-Mail:[\_\_\_\_]

23.2 A Notice shall be deemed to have been given:

- (a) Upon receipt, if delivered in person;
- (b) Upon receipt (confirmed by automatic answer back or equivalent evidence of receipt), if validly transmitted electronically before 3:00 p.m. (local time at the place of receipt) on a Business Day;
- (c) Upon receipt, if delivered by overnight courier; or
- (d) Four Business Days after deposit with postage prepaid and properly addressed, if delivered by United States Postal Service certified or registered mail.
- **23.3** Each of the parties will provide Notice to each other in writing of any change of address, such Notice to become effective 15 days after dispatch.

#### 24. GOVERNING LAW AND JURISDICTION

- 24.1 This Direct Agreement shall be governed by, and construed in accordance with, the laws of the State of Indiana applicable to contracts to be performed within such State. The Parties consent to exclusive jurisdiction of and venue in the federal and state courts located in Marion County, Indiana.
- **24.2** Each of Developer, IFA and the Collateral Agent irrevocably consents to service of process by personal delivery, certified mail, postage prepaid or overnight courier, and waives any different statutory requirements for service of process. Nothing in this Direct Agreement will affect the right of any party to serve process in any other manner permitted by law.
- 24.3 Each of IFA, Developer and the Collateral Agent hereby (a) certifies that no representative, agent or attorney of another party has represented, expressly or otherwise, that the other party would, in the event of a proceeding, seek to attack the enforceability of the foregoing waiver and (b) acknowledges that it has been induced to sign, and to change its position in reliance upon the benefits of, this Direct Agreement by, among other things, the mutual waivers in this Section 24.

#### 25. CONFLICT WITH AGREEMENT

In the event of any irreconcilable conflict or inconsistency between the provisions of this Direct Agreement and the PPA, including, without limitation, <u>Sections 13 and 21</u> of the PPA, the provisions of this Direct Agreement shall control and prevail.

IN WITNESS WHEREOF, each of the parties hereto has caused this Direct Agreement to be duly executed by its duly authorized officer as of the date first written above.

INDIANA FINANCE AUTHORITY
Ву:
Name: Title:
[COLLATERAL AGENT BANK], AS COLLATERAL AGENT
By:
Name: Title:
WVB EAST END PARTNERS, LLC
Ву:
Name: Title:

# SCHEDULE A Form of Substitute Accession Agreement

[Date]	
To:	Indiana Finance Authority  For the attention of: []  [Lender and other parties to Funding Agreements to be listed]  [insert address]  For the attention of: []
From: [Sub	ostituted Entity]
	<u>EAST END CROSSING –</u> LOUISVILLE-SOUTHERN INDIANA OHIO RIVER BRIDGES PROJECT: SUBSTITUTE ACCESSION AGREEMENT
Ladies and	Gentlemen:
amended, a " <b>Agreemen</b> LLC (" <b>Deve</b> amended a <b>Agreement</b> Collateral A	erence is made to the Public-Private Agreement, dated as of December 27, 2012 (as amended and restated, supplemented or otherwise modified from time to time, the tr') between the Indiana Finance Authority (the "IFA") and WVB East End Partners, aloper") and the Direct Agreement, dated as of
1. <u>Sections 10</u>	The undersigned ("we") hereby confirms that it is a Substituted Entity pursuant to and 11 of the Direct Agreement.
Agreement	We acknowledge and agree that, upon and by reason of our execution of this Accession Agreement, we will become a party to the Agreement and the Direct as a Substituted Entity and, accordingly, shall have the rights, powers and of Developer under the Agreement and the Direct Agreement.
3. PPA Docun	We hereby assume all duties, obligations and liabilities of Developer under the nents.
4. purpose of	Our address, fax and telephone number and address for electronic mail for the receiving notices are as follows:
	[contact details of Substituted Entity]
5. accordance such State.	This Substitute Accession Agreement shall be governed by, and construed in with, the law of the State of Indiana applicable to contract to be performed within

The terms set forth herein are hereby agreed to:

# [Substituted Entity] By: Name: Title: Accepted: INDIANA FINANCE AUTHORITY By: Name: Title:

# SCHEDULE B Initial Funding Agreements

Funding Agreemen	ts
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Document	Party 1	Party(ies) 2

**Security Documents** 

Document	Party 1	Party(ies) 2

#### EXHIBIT 22

# EARLY TERMINATION DATES AND TERMS FOR TERMINATION COMPENSATION

All Section references in this <u>Exhibit 22</u> are to the Sections of the Agreement unless expressly provided otherwise.

#### 1. Termination for Convenience

- 1.1 If IFA exercises its right of Termination for Convenience pursuant to <u>Section 20.1</u>, the Early Termination Date shall be as specified in the Notice of Termination for Convenience, but in no event earlier than 30 days after the date such Notice is delivered.
- 1.2 If IFA exercises its right of Termination for Convenience pursuant to Section 20.1, IFA shall pay compensation to Developer in an amount equal to either (a) the Backward Looking Termination for Convenience Amount, or (b) the Forward Looking Termination for Convenience Amount, as selected by Developer in Exhibit 2-J.
- 1.3 The Backward Looking Termination for Convenience Amount shall be calculated as follows (calculated at the Early Termination Date and without duplicative-counting):
  - The Project Debt Termination Amount; plus
  - An amount which, when added to all Distributions described in <u>clause (a)</u> of the definition thereof actually paid to Equity Members or their Affiliates on or before the Early Termination Date:
    - (a) Yields as of the Early Termination Date at an internal rate of return on Committed Investment described in clause (a) of the definition thereof, other than Subordinate Debt (taking into account the timing of such Distributions and Committed Investment), equal to the Original Equity IRR; plus
    - (b) Repays as of the Early Termination Date outstanding Subordinate Debt (excluding Breakage Costs) with interest thereon accrued up to the Early Termination Date at a rate equal to the lesser of (i) the non-default interest rate provided in the Funding Agreements for the Subordinate Debt or (ii) the Original Equity IRR; plus
  - Redundancy Payments for employees of Developer that have been or will be reasonably incurred by Developer as a direct result of termination of the Agreement; plus
  - 4. Subject to <u>Section 19.4.4</u>, any Losses that have been incurred and will be incurred by Developer as a direct result of termination of the Agreement arising out of the termination of contracts with Contractors, including reasonable and documented out-of-pocket costs to demobilize, but only to the extent that:
    - (a) Such Losses are incurred in connection with the East End Crossing and in respect of the provision of services or the completion of work required to be

provided by Developer:

- (b) Such Losses are incurred under arrangements and/or agreements that are consistent with terms of the Agreement, have been entered into in the ordinary course of business and, in the case of contracts with Affiliates, are on commercially reasonable terms, and
- (c) Each of Developer and the relevant Contractors has used reasonable efforts to mitigate the Losses; minus
- 5. All amounts standing to the credit of any bank or trust account held by or on behalf of Developer as of the Early Termination Date, except in the Handback Requirements Reserve Account (governed by <u>Section 6.13.4</u>) and the Relief Events Allowance Account (governed by <u>Section 15.6.1</u>); minus
- The portion of any previous payments to Developer that compensated Developer for Extra Work Costs and Delay Costs accruing after the Early Termination Date and attributable to Relief Events that occurred prior to termination.
- 1.4 The Forward Looking Termination for Convenience Amount shall be calculated as follows (calculated at the Early Termination Date and without duplicative-counting):
  - 1. The Project Debt Termination Amount: plus
  - 2. The amount of all Distributions described in <u>clause (a)</u> of the definition thereof to Equity Members or their Affiliates anticipated in the Financial Model to be paid on Committed Investment and outstanding Subordinate Debt (excluding Breakage Costs) between the Early Termination Date until the date of expiration of the Term, each amount discounted back (i) for Committed Investment, at the Original Equity IRR, and (ii) for outstanding Subordinate Debt, at the lesser of the non-default interest rate provided in the Funding Agreements or the Original Equity IRR, with the discounting in each case to be from the date on which it is shown to be payable in the Financial Model to the Early Termination Date; plus
  - Redundancy Payments for employees of Developer that have been or will be reasonably incurred by Developer as a direct result of termination of the Agreement; plus
  - 4. Subject to <u>Section 19.4.4</u>, any Losses that have been incurred and will be incurred by Developer as a direct result of termination of the Agreement arising out of the termination of contracts with Contractors, including reasonable and documented out-of-pocket costs to demobilize, but only to the extent that:
    - (a) Such Losses are incurred in connection with the East End Crossing and in respect of the provision of services or the completion of work required to be provided by Developer;
    - (b) Such Losses are incurred under arrangements and/or agreements that are consistent with terms of the Agreement, have been entered into in the ordinary course of business and, in the case of contracts with Affiliates, are on commercially reasonable terms, and

- (c) Each of Developer and the relevant Contractors has used reasonable efforts to mitigate the Losses; minus
- 5. All amounts standing to the credit of any bank or trust account held by or on behalf of Developer as of the Early Termination Date, except in the Handback Requirements Reserve Account (governed by <u>Section 6.13.4</u>) and the Relief Events Allowance Account (governed by <u>Section 15.6.1</u>); minus
- 6. The portion of any previous payments to Developer that compensated Developer for Extra Work Costs and Delay Costs accruing after the Early Termination Date and attributable to Relief Events that occurred prior to termination.
- 1.5 The Termination Compensation under <u>Section 1.3</u> or <u>1.4</u> above, as applicable, shall be due and payable by IFA in immediately available funds within 90 days after:
  - 1. IFA gives its Notice of its election to terminate;
  - The Collateral Agent provides IFA with a written statement as to the Project Debt Termination Amount, with documentation reasonably required by IFA to support such statement; and
  - Developer provides IFA with a written statement as to the amounts payable and deductible pursuant to subsections 2 through 6 of <u>Section 1.3</u> or <u>1.4</u> above, as applicable, with documentation reasonably required by IFA to support such statement and a certification that such amounts are true and correct.
- 1.6 The Termination Compensation shall bear interest from the later of the Early Termination Date or the date that is five days after IFA receives the statements and documentation set forth in subsections 2 and 3 of Section 1.5 above, until the date paid, at an annual rate equal to Developer's then weighted average cost of Project Debt and Committed Investment, assuming, however, (a) non-default rates of interest, (b) a cost of Committed Investment other than Subordinate Debt equal to that set forth in Section 1.3 or 1.4 above, as applicable, and (c) a cost of Subordinate Debt equal to that set forth in Section 1.3 or 1.4 above, as applicable. Payments shall be applied first to accrued unpaid interest and second to the outstanding Termination Compensation amount.

# 2. Termination for Extended Relief Events, Extended Permitted Closure or Insurance Unavailability

- **2.1** If the Agreement is terminated pursuant to <u>Section 20.2</u>, the Early Termination Date shall be 60 days after, as the case may be:
  - 1. The date of acceptance of the conditional election to terminate;
  - The date IFA delivers Notice of election to terminate pursuant to <u>Section 20.2.2</u>;
  - 3. The date either Party delivers Notice of its unconditional election to terminate pursuant to Section 20.2.5.

- 2.2 If the Agreement is terminated pursuant to <u>Section 20.2</u>. IFA shall pay compensation to Developer calculated as follows (calculated at the Early Termination Date and without double-counting):
  - 1. The Project Debt Termination Amount; plus
  - 2. Amounts paid by the Equity Members or their Affiliates to Developer in the form of Committed Investment described in <u>clause (a)</u> of the definition thereof or in the form of Subordinate Debt up until the Early Termination Date, less any amounts actually received by the Equity Members or their Affiliates from Developer as Distributions described in <u>clause (a)</u> of the definition thereof, provided if the amounts calculated pursuant to this subsection 2 are less than zero, then, for purposes of the calculation of the termination amount, they shall be deemed to be zero; provided, further, that if the termination under <u>Section 20.2.1.1(a)</u> is due to Environmental Litigation, amounts payable under this <u>Section 2.2(2)</u> shall include a rate of return (i) with respect to Committed Investment equal to the Original Equity IRR and (ii) with respect to Subordinate Debt equal to the Isser of the Original Equity IRR or the non-default interest rate owing on the Subordinate Debt.; plus
  - Redundancy Payments for employees of Developer that have been or will be reasonably incurred by Developer as a direct result of termination of the Agreement; plus
  - 4. Subject to <u>Section 19.4.4</u>, any Losses that have been or will be incurred by Developer as a direct result of termination of the Agreement arising out of the termination of contracts with Contractors, including reasonable and documented out-of-pocket costs to demobilize, but only to the extent that: such
    - (a) Such Losses are incurred in connection with the East End Crossing and in respect of the provision of services or the completion of work required to be provided by Developer;
    - (b) Such Losses are incurred under arrangements and/or agreements that are consistent with terms of the Agreement, have been entered into in the ordinary course of business and, in the case of contracts with Affiliates, are on commercially reasonable terms, and
    - (c) Each of Developer and the relevant Contractors has used reasonable efforts to mitigate the Losses; minus
  - All amounts standing to the credit of any bank or trust account held by or on behalf of Developer as of the Early Termination Date, except in the Handback Requirements Reserve Account (governed by <u>Section 6.13.4</u>) and the Relief Events Allowance Account (governed by Section 15.6.1); minus
  - The portion of any previous payments to Developer that compensated Developer for Extra Work Costs and Delay Costs accruing after the Early Termination Date and attributable to Relief Events that occurred prior to termination.

- 2.3 Payment of the Termination Compensation is conditioned upon IFA's receipt of the following:
  - 1. From the Collateral Agent, a written statement as to the Project Debt Termination. Amount, with documentation reasonably required by IFA to support such statement; and
  - 2. From Developer, a written statement as to the amounts payable and deductible pursuant to subsections 2 through 6 of <u>Section 2.2</u> above, with documentation reasonably required by IFA sufficient to support such statement and a certification that such amounts are true and correct
- **2.4** Provided that IFA has received the statements and documentation set forth in Section 2.3 above, the Termination Compensation under Section 2.2 above shall be due and payable by IFA in immediately available funds as follows:
  - If the termination Notice has been given by Developer.

First, from all amounts held in the MP Relief Event and Termination Compensation Fund or the AP Relief Event and Termination Compensation Fund, as applicable; and;

The remaining balance, in any, in full, not later than (a) July 1 immediately following the date IFA receives the statements and documentation set forth in Section 2.3 above, if such date occurs before August 1, or (b) the second July 1 immediately following the date IFA receives the statements and documentation set forth in Section 2.3 above, if such date occurs on or after August 1.

- 2. If the termination Notice has given by IFA, Termination Compensation shall be due and payable by IFA no later than 90 days after receipt of the written statements referred to in Section 2.3 above.
- 2.5 The Termination Compensation shall bear interest from the later of the Early Termination Date or the date that is five days after IFA receives the statements and documentation set forth in Section 2.3 above, until the date paid. The annual interest rate shall equal Developer's then weighted average cost of Project Debt (including Subordinate Debt, if any) and Committed Investment, assuming however, (a) non-default rates of interest, (b) a cost of Committed Investment other than Subordinate Debt (if any) equal to the Original Equity IRR, and (c) a cost of Subordinate Debt (if any) equal to the lesser of its non-default interest rate or the Original Equity IRR. Payments shall be applied first to accrued unpaid interest and second to the outstanding Termination Compensation amount. Interest shall be due and payable (a) on the dates when interest is required to be paid to Lenders under the Funding Agreements if paid pursuant to Section 2.4(1) above, or (2) on the date of payment of the Termination Compensation if paid pursuant to Section 2.4(2) above.

# 3. Termination for Developer Default

3.1 If the Agreement is terminated due to a Default Termination Event pursuant to Section 20.3, the Early Termination Date shall be effective immediately upon delivery of Notice of termination to Developer and the Collateral Agent, or such other date as IFA may specify in the termination Notice.

- 3.2 If the Agreement is terminated due to a Default Termination Event pursuant to Section 20.3 (but excluding a termination due to a Default Termination Event under Section 19.1.1.16 or 19.1.1.17) before the Substantial Completion Date, and if and only if no Lender has duly exercised an option to obtain New Agreements from IFA pursuant to Section 21.4.4, then IFA shall pay compensation to Developer (calculated at the Early Termination Date and without duplicative-counting) equal to the greater of:
  - 1. The amount calculated as follows:
    - (a) The amount of the Project Adjusted Costs; plus
    - (b) The amount of any compensation accrued under <u>Section 15.3</u> but not yet paid; minus
    - (c) The amount of any Losses that have been or will be incurred by IFA resulting from the Developer Default, including the damages described in Section 19.2.5; minus
    - (d) The portion of any lump sum amounts previously paid (excluding the Milestone Payment and Availability Payments) by IFA to Developer under the Agreement as compensation for Extra Work Costs or Delay Costs not yet incurred by Developer relating to a Relief Event that occurred prior to termination; and
  - 2. The amount calculated as follows:
    - (a) 80% of the Project Debt Termination Amount; minus
    - (b) The portion of any lump sum amounts previously paid (excluding the Milestone Payment and Availability Payments) by IFA to Developer under the Agreement as compensation for Extra Work Costs or Delay Costs not yet incurred by Developer relating to a Relief Event that occurred prior to termination, except there shall not be subtracted the portion of previous payments by IFA to Developer that Developer applied to reduce the principal amount of the Project Debt.
- 3.3 If the Agreement is terminated due to a Default Termination Event pursuant to Section 20.3 (but excluding a termination due to a Default Termination Event under Section 19.1.1.16 or 19.1.1.17) on or after the Substantial Completion Date, and if and only if no Lender has duly exercised an option to obtain New Agreements from IFA pursuant to Section 21.4.4, then IFA shall pay compensation to Developer (calculated at the Early Termination Date and without duplicative-counting) equal to the greater of:
  - 1. The amount calculated as follows:
    - (a) The amount of the Project Adjusted Costs; minus
    - (b) The value of the accrued amortization of the Project Adjusted Costs funded with Committed Investment, calculated as the greater of (i) the total accrued amortization through the Early Termination Date determined using a straight line amortization schedule over 35 years commencing on the

- Substantial Completion Date, and (ii) the total accrued amortization through the Early Termination Date as shown in the Financial Model; minus
- (c) The value of the accrued amortization of the Project Adjusted Costs funded with Project Debt, calculated as the total accrued amortization of Project Debt through the Early Termination Date as shown in the Financial Model; minus
- (d) The amount of any Losses recoverable by IFA under the PPA Documents resulting from the Developer Default, including the damages described in Section 19.2.5; minus
- (e) The portion of any lump sum amounts previously paid (excluding the Milestone Payment and Availability Payments) by IFA to Developer under the Agreement as compensation for future Extra Work Costs or Delay Costs not yet incurred by Developer relating to a Relief Event that occurred prior to termination; and
- 2. The amount calculated as follows:
  - (a) 80% of the Project Debt Termination Amount; minus
  - (b) The portion of any lump sum amounts previously paid (excluding the Milestone Payment and Availability Payments) by IFA to Developer under the Agreement as compensation for future Extra Work Costs or Delay Costs not yet incurred by Developer relating to a Relief Event that occurred prior to termination, except there shall not be subtracted the portion of previous payments by IFA to Developer that Developer applied to reduce the principal amount of the Project Debt.
- 3.4 If the Agreement is terminated due to a Default Termination Event under <u>Section 19.1.1.16</u> or <u>19.1.1.17</u>, or if the Agreement is terminated due to a Default Termination Event and any Lender duly exercises an option to obtain New Agreements from IFA pursuant to <u>Section 13.2</u> of any Direct Agreement. If any, then no compensation shall be due to Developer.
- 3.5 Payment of the Termination Compensation is conditioned upon IFA's receipt of the following:
  - 1. From the Collateral Agent, a written statement as to the Project Debt Termination Amount, with documentation reasonably required by IFA to support such statement; and
  - 2. From Developer, a written statement as to the amounts described in subsections 1(a) and 1(b) of <u>Section 3.2</u> above or subsections 1(a), (1(b) and 1(c) of <u>Section 3.3</u> above, as the case may be, with written documentation sufficient to support such statement and a certification that such amounts are true and correct.
- 3.6 The Termination Compensation under <u>Section 3.2</u> or <u>3.3</u> above, as applicable, shall be due and payable by IFA in immediately available funds as follows:
  - 1. First from all amounts in the MP Relief Event and Termination Compensation

Fund or the AP Relief Event and Termination Compensation Fund, as applicable. If, however, any Lender continues to have the option to obtain New Agreements from IFA pursuant to <u>Section 21.4.4</u>, then installments of the Termination Compensation shall not commence until the first Monthly Disbursement Date after the earlier of (a) the date IFA receives written waivers of all such options from all applicable Lenders or (b) all such options expire without exercise; and

- 2. The remaining balance, if any, in full, not later than (a) July 1 of the year immediately following the date IFA receives the statements and documentation set forth in <u>Section 2.3</u> above, if such date occurs before August 1, or (b) the second July 1 immediately following the date IFA receives the statements and documentation set forth in <u>Section 2.3</u> above, if such date occurs on or after August 1.
- 3.7 The Termination Compensation shall bear interest from the later of the Early Termination Date or the date that is five days after IFA receives the statements and documentation set forth in Section 3.5 above, until the date paid, at an annual rate equal to Developer's then weighted average cost of Project Debt, excluding however, Subordinate Debt (if any) and assuming non-default rates of interest. Payments shall be applied first to accrued unpaid interest and second to the outstanding Termination Compensation amount.

### 4. Termination for IFA Default, Suspension of Work or Delayed Notice to Proceed

- 4.1 If the Agreement is terminated pursuant to <u>Section 20.4</u>, the Early Termination Date shall be effective 30 days after Developer's delivery of Notice of termination to IFA.
- **4.2** If the Agreement is terminated pursuant to <u>Section 20.4</u>, IFA shall pay compensation to Developer in an amount equal to the amount described in Section 1.2 above.
- **4.3** Payment of the Termination Compensation is conditioned upon IFA's receipt of the following:
  - 1. From the Collateral Agent, a written statement as to the Project Debt Termination Amount, with documentation reasonably required by IFA to support such statement; and
  - 2. From Developer, a written statement as to the amounts payable and deductible pursuant to subsections 2 through 6 of <u>Section 1.3</u> or <u>1.4</u>, as applicable, with documentation reasonably required by IFA sufficient to support such statement and a certification that such amounts are true and correct.
  - **4.4** The Termination Compensation under <u>Section 4.2</u> above shall be due and payable by IFA in immediately available funds no later than 90 days after receipt of the written statements referred to in Section 4.3 above.
- 4.5 The Termination Compensation shall bear interest from the later of the Early Termination Date or the date that is five days after IFA receives the statements and documentation set forth in Section 4.3 above, until the date paid, at an annual rate equal to Developer's then weighted average cost of Project Debt and Committed Investment, assuming, however, (a) non-default rates of interest, (b) a cost of Committed Investment other than Subordinate Debt equal to that set forth in Section 1.3 or 1.4 above, as applicable, and (c) a cost of Subordinate Debt equal to that set forth in Section 1.3 or 1.4 above, as applicable.

Payments shall be applied first to accrued unpaid interest and second to the outstanding Termination Compensation amount.

#### 5. Termination by Court Ruling

- Termination by Court Ruling under Section 20.5 becomes effective, and automatically terminates the Agreement, upon issuance of the final, non-appealable court order by a court of competent jurisdiction.
- If the Agreement is terminated pursuant to Section 20.5, IFA shall pay compensation to Developer in an amount equal to the amount described in Section 2.2 above provided that for purposes of calculating the amount of termination compensation payable under this Section 5.2, amounts payable under Section 2.2(2) shall include a rate of return on such amounts paid by the Equity Members or their Affiliates in the form of Committed Investment or drawn under Subordinate Debt from the date paid or drawn under the Subordinate Debt until the Early Termination Date equal to 5% per annum; provided, that for avoidance of doubt, if the Termination by Court Ruling is due to Environmental Litigation, such rate of return (i) with respect to Committed Investment shall equal the Original Equity IRR and (ii) with respect to Subordinate Debt shall equal to the lesser of the Original Equity IRR or the non-default interest rate owing on the Subordinate Debt.
- 5.3 Payment of the Termination Compensation is conditioned upon IFA's receipt of the following:
  - From the Collateral Agent, a written statement as to the Project Debt Termination Amount, with documentation reasonably required by IFA to support such statement: and
  - From Developer, a written statement as to the amounts payable and deductible pursuant to subsections 2 through 6 of Section 2.2 above, with documentation reasonably required by IFA sufficient to support such statement and a certification that such amounts are true and correct.
- The Termination Compensation under Section 5.2 above shall be due and payable by IFA in immediately available funds as follows:
  - First from all amounts held in the MP Relief Event and Termination Compensation Fund or the AP Relief Event and Termination Compensation Fund as applicable; and
  - The remaining balance, if any, in full, not later than (a) July 1 of the year immediately following the date IFA receives the statements and documentation set forth in Section 2.3 above, if such date occurs before August 1, or (b) the second July 1 immediately following the date IFA receives the statements and documentation set forth in Section 2.3 above, if such date occurs on or after August 1.
- The Termination Compensation shall bear interest from the later of the Early Termination Date or the date that is five days after IFA receives the statements and documentation set forth in Section 5.3 above, until the date paid. The annual interest rate shall equal Developer's then weighted average cost of Project Debt (including Subordinate Debt, if any) and Committed Investment, assuming however, (a) non-default rates of interest, (b) a cost

of Committed Investment other than Subordinate Debt (if any) equal to the Original Equity IRR. and (c) a cost of Subordinate Debt (if any) equal to the lesser of its non-default interest rate or the Original Equity IRR. Payments shall be applied first to accrued unpaid interest and second to the outstanding Termination Compensation amount. Interest shall be due and payable on the dates when interest is required to be paid to Lenders under the Funding Agreements,

#### 6. Termination for Failure of Financial Close

- 6.1 If the Agreement is terminated pursuant to Section 20.6.1. IFA shall pay compensation to Developer an amount calculated as follows (calculated at the Early Termination Date and without double-counting):
  - 1. The lesser of (a) (i) Developer's documented, actual, reasonable external costs incurred. without mark-up by Developer for overhead or profit, for the satisfaction of conditions precedent to each of issuance of NTP1 and to the commencement of the Design Work and for the preparation of Design Documents between the date of satisfaction of the conditions precedent to commencement of the Design Work and the date of delivery of the Notice of termination, plus (ii) Developer's documented, actual, reasonable external costs incurred for the work necessary to achieve Financial Close and the conditions precedent to issuance of NTP2, including, without limitation, in connection with conducting the IPDC, if IFA has issued the IPDC Commencement Notice, and to satisfy the conditions precedent to issuance of NTP1, conditions precedent to commencement of the Design Work, and conditions precedent to issuance of NTP2, plus (iii) legal advisor, insurance advisor and technical advisor fees payable or reimbursable to Lenders who provided commitments in connection with the delivery of the Financial Proposal as well as breakage costs and work fees, if any, payable to the Lenders who provided price commitments in connection with the submission of the Financial Proposal in an amount not to exceed 1% of the principal amount of such commitments, that are or were due and payable by Developer upon the expiration of such commitments if IFA gave its Notice extending the period for Financial Close as provided in Section 13.7.2 of the PPA beyond the commitment period set forth in such commitments, or (b) \$43,000,000; plus

### 2. \$2,500,000.

- 6.2 For purposes of this Section 6, "external costs" means only those costs that are payable for work or services performed between the Effective Date and the Termination Date by Contractors, rating agencies, financial advisors, technical advisors, insurance advisors, and legal counsel that are not Equity Members. "External costs" expressly excludes costs of work and services performed by, and the overhead costs of, Developer and Equity Members,
- Payment of the Termination Compensation is conditioned upon IFA's receipt from Developer of a written statement as to the amounts payable pursuant to subsection 1 of Section 6.1 above, with documentation reasonably required by IFA sufficient to support such statement and a certification that such amounts are true and correct. Compensation as provided in this Section 6 shall be due and payable no later than 60 days following IFA's receipt of Developer's written statement as described in this Section 6.3.

### EXHIBIT 23

### FEDERAL REQUIREMENTS

Exhibit Description	No. of Pages
Attachment 1 – Federal Provisions	2
Attachment 2 - FHWA Form 1273	13
Attachment 3 – Federal Prevailing Wage Rates	64
Attachment 4 - Equal Employment Opportunity	5
Attachment 5 – Affirmative Action	2
Attachment 6 - Compliance with 23 U.S.C. §129(a)(3)	1

### ATTACHMENT 1 TO EXHIBIT 23

### FEDERAL REQUIREMENTS FOR FEDERAL-AID CONSTRUCTION EAST END CROSSINGS

GENERAL. The provisions of this Exhibit 23 (Federal Requirements) shall be construed and applied according to Section 24.2 of the Agreement (notwithstanding that they may appear to conflict with Section 24.2). The "Required Contract Provisions, Federal-Aid Construction Contracts, Form FHWA 1273," are included in this Exhibit 23 (Federal Requirements). Whenever in said required contract provisions, and those at Section 3 of Attachment 4 to this Exhibit 23, references are made to:

- (a) "contracting officer" or "authorized representative," such references shall be construed to mean IFA or its Authorized Representative;
- (b) "contractor," "prime contractor," "bidder," "proposer," "Federal-aid construction contractor," "prospective first tier participant," or "First Tier Participant," such references shall be construed to mean Developer or its authorized representative and/or the Design-Build Contractor for the Work to which this <a href="Exhibit 23">Exhibit 23</a> (Federal Requirements) applies or its authorized representative, as may be appropriate under the circumstances;
- (c) "contract" "prime contract," "Federal-aid construction contract" or "design-build contract," such references shall be construed to mean the Design-Build Contract for the Work to which this Exhibit 23 (Federal Requirements) applies;
- (d) "subcontractor," "supplier," "vendor," "prospective lower tier participant," " lower tier prospective participant," "Lower Tier participant," or "lower tier subcontractor," such references shall be construed to mean, as appropriate, Contractors other than the Design-Build Contractor for the Work to which this Exhibit 23 (Federal Requirements) applies; and
- (e) "department," "agency," "department or agency with which this transaction originated," or "department or agency entering into this transaction," such references shall be construed to mean IFA, except where a different department or agency is specified.

PERFORMANCE OF PREVIOUS CONTRACT. — In addition to the provisions in Form 1273 required contract provisions, Developer shall cause the contractor to comply with the following:

The bidder shall execute the CERTIFICATION WITH REGARD TO THE PERFORMANCE OF PREVIOUS CONTRACTS OR SUBCONTRACTS SUBJECT TO THE EQUAL OPPORTUNITY CLAUSE AND THE FILING OF REQUIRED REPORTS located in the proposal. No request for subletting or assigning any portion of the contract in excess of \$10,000 will be considered under the provisions of the required contract provisions unless such request is accompanied by the CERTIFICATION referred to above, executed by the proposed subcontractor.

NON-COLLUSION PROVISION. — The provisions in this section are applicable to all contracts except contracts for Federal Aid Secondary projects. Title 23, United States Code, Section 112, requires as a condition precedent to approval by the Federal Highway Administrator of the contract for this work that each bidder file a sworn statement executed by, or on behalf of, the person, firm, association, or corporation to whom such contract is to be awarded, certifying that such person, firm, association, or corporation has not, either directly or indirectly, entered into

any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the submitted bid. A form to make the non-collusion affidavit statement required by Section 112 as a certification under penalty of perjury rather than as a sworn statement as permitted by 28 U.S.C., Sec. 1746, is included in the Proposal.

PARTICIPATION BY DISADVANTAGED BUSINESS ENTERPRISES IN SUBCONTRACTING.—Part 26, Title 49, Code of Federal Regulations applies to this project. Pertinent sections of said Code are incorporated within other sections of the Contract and the IFA DBE Special Provisions (Exhibit 7) adopted pursuant to 49 CFR Part 26.

### CONVICT PRODUCED MATERIALS

- a. FHWA Federal-aid projects are subject to 23 CFR § 635.417, Convict produced materials.
- b. Materials produced after July 1, 1991, by convict labor may only be incorporated in a Federal aid highway construction projects if such materials have been: (i) produced by convicts who are on parole, supervised release, or probation from a prison, or (ii) produced in a prison project in which convicts, during the 12 month period ending July 1, 1987, produced materials for use in Federal aid highway construction projects, and the cumulative annual production amount of such materials for use in Federal aid highway construction does not exceed the amount of such materials produced in such prison project for use in Federal aid highway construction during the 12 month period ending July 1, 1987.

BUY AMERICA REQUIREMENTS — FHWA Federal-aid projects are subject to 23 CFR § 635.410, Buy America requirements. The provisions of 23 CFR § 635.410 are incorporated herein by reference.

### ACCESS TO RECORDS

- a. As required by 49 CFR 18.36(i)10), Developer and its Contractors shall allow FHWA and the Comptroller General of the United States, or their duly authorized representatives, access to all books, documents, papers, and records of Developer and Contractors which are directly pertinent to any grantee or subgrantee contract, for the purpose of making audit, examination, excerpts, and transcriptions thereof. In addition, as required by 49 CFR 18.36(i)(11), Developer and its Contractor shall retain all such books, documents, papers, and records for three years after final payment is made pursuant to any such contract and all other pending matters are closed.
- b. Developer agrees to include this section in each Contract at each tier, without modification except as appropriate to identify the Contractor who will be subject to its provisions.

### **ATTACHMENT 2 TO EXHIBIT 23**

### REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

General II.

Nondiscrimination III. Nonsegregated Facilities

Davis-Bacon and Related Act Provisions IV Contract Work Hours and Safety Standards Act ٧.

VI. Subjetting or Assigning the Contract

Safety: Accident Prevention VII.

False Statements Concerning Highway Projects VIII. implementation of Clean Air Act and Federal IX.

Water Pollution Control Act

Compliance with Government-wide Suspension χ. and Debarment Requirements

Certification Regarding Use of Contract Funds for XI. Lobbying

### **ATTACHMENTS**

A, Employment and Materials Preference for Appalachian Development Highway System or Appalachlan Local Access Road Contracts (Included in Appalachian contracts only)

### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower fier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bld proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work

performed on the contract by piecework, station work, or by subcontract.

- 3. A breach of any of the stipulations contained in these Regulred Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-ald highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

### II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794). Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the regulrements of the Equal Opportunity Clause in 41 CFR 60-1,4(b) and, for all construction contracts exceeding \$10,000. the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 28 and 27; and 23 OFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1, Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28

INDIANA FINANCE AUTHORITY EAST END CROSSING 421034

ATTACHMENT 2 TO EXHIBIT 23

Page 1 of 12.

December 27, 2012 PUBLIC-PRIVATE AGREEMENT ATTACHMENT 2 TO EX 23 REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS FHWA Form 1273, Rev. May 1, 2012 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U,S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U,S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

- EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
- d. Notices and posters setting forth the contractor's EEO polloy will be placed in areas readily accessible to

amployees, applicants for employment and potential amployees.

- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- 4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring half referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment, information and procedures with regard to referring such applicants will be discussed with employees.
- 8. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate

corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

#### 6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the eyent a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs almed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill

the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

- 8. Reasonable Accommodation for Applicants I Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compilance with their EEO obligations.

### 10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
- a. The records kept by the contractor shall document the following:
  - (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;

- (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
- (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women:
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FriWA-1391. The staffing date should represent the project work force on board in all or any part of the last payroli period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

### III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-filer subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

### 1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and frings benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 6.6(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroli records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Dayle-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can he easily seen by the workers.

- b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
  - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
  - (ii) The classification is utilized in the area by the construction industry; and
  - (III) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
  - (2) If Irie contractor and the laborers and mechanics to be employed in the classification (If known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division,

INDIANA FINANCE AUTHORITY EAST END CROSSING 421034 ATTACHMENT 2 TO EXHIBIT 23

Page 4 of 12

December 27, 2012

PUBLIC-PRIVATE AGREEMENT
ATTACHMENT 2 TO EX 23

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA Form 1273, Rev. May 1, 2012

Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

- (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for frings benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fittle fringe benefit or an hourly cash equivalent thereof.
- d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any taborer or mechanic the amount of any costs reasonably anticipated in providing bone fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the centractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

### 2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Lebor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or quarantee of funds until such violations have ceased.

### 3. Payrolls and basic records

- a. Payrolis and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bone fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic Include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(h)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.doi.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolis by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DQT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
  - (i) That the payroll for the payroll period contains the information required to be provided under  $\S6.5$  (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under  $\S5.5$  (a)(3)(i) of

Regulations, 29 CFR part 5, and that such information is correct and complete;

- (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
- (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract,
- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Doparlment of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor falls to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, fallure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

### 4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training, Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll INDIANA FINANCE AUTHORITY

ATTACHMI

EAST END CROSSING 421034 ATTACHMENT 2 TO EXHIBIT 23

Page 6 of 12

at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage datermination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeymen's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program, if the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the dessification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not

December 27, 2012

PUBLIC-PRIVATE AGREEMENT

ATTACHMENT 2 TO EX 23

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

FHWA Form 1273, Rev. May 1, 2012

less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
  - d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certifled by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

- 5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- 6. Subcontracts. The confractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- 7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 6.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- 8. Compilance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract;
- 9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
- 10. Certification of eligibility.
- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Dayls-Bacon Act or 29 CFR 6.12(a)(1).

- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

### V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.6(a) or 29 CFR 4.8. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpald wages, in addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Golumbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forly hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section,
- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause sot forth in paragraph (2.) of this section.
- 4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for

compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1,) through (4,) of this section.

### VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635,116).
- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
  - (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
  - (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in

INDIANA FINANCE AUTHORITY EAST END CROSSING 421034 ATTACHMENT 2 TO EXHIBIT 23

Page 8 of 12

accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

- 4. No portion of the contract shall be subtet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.
- 5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own selfperformance requirements.

### VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 636). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
- 3. Pursuant to 29 CFR 1926.3, It is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. § 3704).

### VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

December 27, 2012
PUBLIC-PRIVATE AGREEMENT
ATTACHMENT 2 TO EX 23
REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CON TRACTS
FHWA Form 1273, Rev. May 1, 2012

### This provision is applicable to all Federalaid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honeatly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Foderal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished. In connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 6 years or both."

## IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts,

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

# X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more ~ as defined in 2 CFR Parts 180 and 1200.

- 1. Instructions for Certification First Tier Participants:
- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first fler participant shall submit an explanation of why it cannot provide the certification set out below. The certification of explanation will be considered in connection with the department or agency's determination whether to enter into this transaction, However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred,"
  "suspended," "Ineligible," "participant," "person," "principal,"
  and "voluntarily excluded," as used in this clause, are
  defined in 2 CFR Parts 180 and 1200. "First Tier Goyered
  Transactions" refers to any covered transaction belween a
  grantee or subgrantee of Federal funds and a participant
  (such as the prime or general contract). "Lower Tier
  Covered Transactions" refers to any covered transaction
  under a First Tier Covered Transaction (such as
  subcontracts). "First Tier Participant" refers to the participant
  who has entered into a covered transaction with a grantee of
  subgrantee of Federal funds (such as the prime or general
  contractor). "Lower Tier Participant" refers any participant
  who has entered into a covered transaction with a First Tier

INDIANA FINANCE AUTHORITY EAST END CROSSING 421034 ATTACHMENT 2 TO EXHIBIT 23
Page 9 of 12

December 27, 2012
PUBLIC-PRIVATE AGREEMENT
ATTACHMENT 2 TO EX 23
REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA Form 1273, Rev. May 1, 2012

Participant or other Lower Tier Participants (such as subcontractors and suppliers).

- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause filled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tler covered transaction that is not departed, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tler prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- I. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for gause or default.

### 2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals;
- Are not presently debarred, auspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezziement, theff, forgery, bribery, faisification or destruction of records, making faise statements, or receiving stolen property;
- (3) Are not presently indicated for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default,
- b. Where the prespective participant is unable to certify to any of the statements in this certification, such prespective participant shall attach an explanation to this proposal.
- 2, Instructions for Certification Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred,"
  "suspended," "ineligible," "participant," "person," "principal,"
  and "voluntarily excluded," as used in this clause, are
  defined in 2 CFR Parts 180 and 1200. You may contact the
  person to which this proposal is submitted for assistance in
  obtaining a copy of those regulations. "First Tier Covered
  Transactions" refers to any covered transaction between a
  grantee or subgrantee of Federal funds and a participant
  (such as the prime or general contract). "Lower Tier
  Covered Transactions" refers to any covered transaction
  under a First Tier Covered Transaction (such as
  subcontracts). "First Tier Participant" refers to the participant
  who has entered into a covered transaction with a grantee or
  subgrantee of Federal funds (such as the prime or general
  contractor). "Lower Tier Participant" refers any participant
  who has entered into a covered transaction with a First Tier
  Participant or other Lower Tier Participents (such as
  subcontractors and suppliers).

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- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower iter covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epis.gov/), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, ineligibility and Voluntary Exclusion--Lower Tier Participants:

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- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

### XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal ioan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1362. Any person who falls to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this cerlification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

# ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-ald projects funded under the Appalachian Regional Development Act of 1965.

- 1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
- a. To the extent that qualified persons regularly residing in the area are not available.
- b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- o. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
- 2. The contractor shall place a job order with the State Employment Service Indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other perlinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
- 3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
- 4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.
- 5. The provisions of 23 CFR 633,207(e) allow the contracting agency to provide a contractual preference for

the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

### ATTACHMENT 3 TO EXHIBIT 23

### FEDERAL PREVAILING WAGE RATE

The prevailing wage rates for the Work through Final Acceptance shall be the rates applicable to each county where any of such Work will be performed. Such prevailing wage rates are set forth below.

### Indiana

IN120006 MOD 28 REVISED 10/26/12 IN6
\*\*\*\*\*\*\*\* THIS WAGE DETERMINATION WAS REPLACED ON 10/26/12\*\*\*\*\*\*\*\*

General Decision Number: fN120006 09/28/2012

Superseded General Decision Number: IN20100006

State: Indiana

Construction Types: Heavy and Highway

Counties: Adams, Allen, Bartholomew, Benton, Blackford, Boone, Brown, Carroll, Cass, Clark, Clay, Clinton, Crawford, Daviess, Dearborn, Decatur, DeKalb, Delaware, Dubois, Elkhart, Fayette, Floyd, Fountain, Franklin, Fulton, Gibson, Grant, Greene, Hamilton, Hancock, Harrison, Hendricks, Henry, Howard, Huntington, Jackson, Jasper, Jay, Jefferson, Jennings, Johnson, Knox, Kosciusko, Lagrange, Lawrence, Madison, Marion, Marshall, Martin, Miami, Monroe, Montgomery, Morgan, Newton, Noble, Ohio, Orange, Owen, Parke, Perry, Pike, Posey, Pulaski, Putnam, Randolph, Ripley, Rush, Scott, Shelby, Spencer, Starke, Steuben, Sullivan, Switzerland, Tippecanoe, Tipton, Union, Vanderburgh, Vermillion, Vigo, Wabash, Warren, Warrick, Washington, Wayne, Wells, White and Whitley Counties in Indiana.

\* EXCEPT LAKE, LAPORTE, PORTER AND ST. JOSEPH COUNTIES. HEAVY AND HIGHWAY CONSTRUCTION PROJECTS.

### Modification Number Publication Date

- 0 01/06/2012
- 1 01/13/2012
- 2 01/27/2012
- 3 02/03/2012
- 4 02/17/2012
- 5 02/24/2012
- 6 03/02/2012

03/23/2012
03/30/2012
04/06/2012
04/13/2012
04/27/2012
05/11/2012
05/18/2012
06/01/2012
06/08/2012
06/15/2012
06/22/2012
06/29/2012
07/06/2012
07/13/2012
07/20/2012
07/27/2012
08/03/2012
08/10/2012
08/17/2012
08/24/2012
08/31/2012
09/28/2012

<sup>\*</sup> ASBE0008-004 07/01/2012

DEARBORN, FAYETTE, FRANKLIN, OHIO, RIPLEY SWITZERLAND AND UNION COUNTIES

Rates Fringes

Asbestos Workers/Insulator (Includes application of all insulating materials, protective coverings, coatings & finishings to all types of mechanical systems).....\$ 28.50 13.22 HAZARDOUS MATERIAL HANDLER (Includes preparation, wettings, stripping, removal, scrapping, vacuuming, bagging & disposing of all insulation materials, whether they contain asbestos or not, from mechanical systems).....\$ 23.75 11.20

ASBE0018-004 06/01/2011

BARTHOLOMEW, BENTON, BOONE, CARROLL, CLINTON, DELAWARE, FOUNTAIN, HAMILTON, HANCOCK, HENDRICKS, HOWARD, JOHNSON, MADISON, MARION, MONROE, MONTGOMERY, MORGAN, SHELBY, TIPPECANOE, TIPTON, AND WARREN COUNTIES:

### Rates Fringes

**ASBESTOS WORKER/HEAT & FROST INSULATOR** (includes application of all insulating materials, protective coverings, coatings and finishings to all types of mechanical systems).....\$ 31.23 14.60 HAZARDOUS MATERIAL HANDLER (includes preparation, wettings, stripping, removal, scrapping, vacuuming, bagging & disposing of all insulation materials, whether they contain asbestos or not, from mechanical systems)......\$ 18.75 9.70

A\$BE0037-004 04/01/2012

DAVIESS, DUBOIS, GIBSON, KNOX, MARTIN, PIKE, POSEY, SPENCER, SULLIVAN, VANDERBURGH AND WARRICK COUNTIES

### Rates Fringes

ASBESTOS WORKER/HEAT & FROST **INSULATOR** (includes application of all insulating materials protective coverings, coatings an finishes to all types of mechanical systems. Also the application of firestopping, material openings and penetrations in walls, floors, ceilings, curtain walls and all lead abatement.)...\$ 29.45 15.21 HAZARDOUS MATERIAL HANDLER (Includes preparation, wetting, stripping, removal, scrapping, vacuuming, bagging

and disposing of all insulation materials, whether they contain asbestos or not, from mechanical systems).......\$ 19.35

ASBE0041-002 06/01/2012

ADAMS, ALLEN, BLACKFORD, DE KALB, GRANT, HUNTINGTON, JAY, MIAMI, NOBLE, STEUBEN, WABASH, WELLS AND WHITLEY COUNTIES:

Rates Fringes

ASBESTOS WORKER/HEAT & FROST INSULATOR (includes application of all insulating materials, protective coverings, coatings and finishings to all types of mechanical systems)......\$ 29.98 12.56 HAZARDOUS MATERIAL HANDLER (includes preparation, wettings, stripping, removal, scrapping, vacuuming, bagging & disposing of all insulation materials, whether they contain asbestos or not, from mechanical systems)......\$ 21.15

ASBE0051-003 04/01/2012

CLARKE, FLOYD, HARRISON and JENNINGS COUNTIES

Rates Fringes

ASBESTOS WORKER/HEAT & FROST
INSULATOR (Includes
application of all insulating
materials, protective
coverings, coatings and
finishings to all types of
mechanical systems)...............\$ 24.67 11.08
HAZARDOUS MATERIAL HANDLER
(includes preparation,
wettings, stripping, removal,
scrapping, vacuuming, bagging
& disposing of all insulation
materials, whether they

contain asbestos or not, from mechanical systems)......\$ 19.35 10.35

ASBE0079-002 07/01/2008

### RANDOLPH AND WAYNE COUNTIES

Rates Fringes

**ASBESTOS WORKER/HEAT & FROST** INSULATOR (Includes application of all insulating materials, protective coverings, coatings & finishings to all types of 8.89 HAZARDOUS MATERIAL HANDLER (Includes preparation, wetting, stripping, removal, scrapping, vacuuming, bagging & disposing of all insulation materials, whether they contain asbestos or not, from mechanical systems)).....\$ 22.60 9.40 

INDIANAPOLIS
BOONE, HANCOCK, HENDRICKS, JOHNSON, MARION, MONTGOMERY, MORGAN
and SHELBY COUNTIES

Rates Fringes

FORT WAYNE ADAMS, ALLEN, DEKALB, HUNTINGTON, NOBLE, STEUBEN, WELLS AND WHITLEY COUNTIES:

<sup>\*</sup> BRIN0003-001 06/01/2012

<sup>\*</sup> BRIN0004-004 06/01/2012

#### Rates Fringes

BRICKLAYER (STONE MASON,	
MARBLE MASONS, POINTER,	
CLEANER, AND CAULKER)\$ 28.06	11.88
Terrazzo Grinder Finisher\$ 24.01	8.45
Terrazzo Worker Mechanic\$ 28.52	10.35
Tile Setter & Marble Mason	
Mechanic\$ 25.61 10.35	
Tile, Marble & Terrazzo	
Finisher\$ 20.84 8.45	
***************************************	****

<sup>\*</sup> BRIN0004-009 06/01/2012

BARTHOLOMEW, BROWN, DEARBORN, DECATUR, JENNINGS, MONROE, OHIO, OWENS, RIPLEY and SWITZERLAND COUNTIES

F	₹ates	Fringes	
Bricklayer, Stonema	son	\$ 27.20	9.95
TERRAZZO FINISHEF	}	\$ 18.96	6.30
TERRAZZO WORKER	/SETTER	\$ 29.58	9.93
Tile & Marble Finish	ier\$	19.83	6.32
Tile, Marble Setter	\$ 2	28.99 9	9.83
		or an analysis and an allow and a finish and a second and a	i de un di sente un se

Rates **Fringes** 

### BRICKLAYER

CLARK, FLOYD, & HARRISON COUNTIES BRICKLAYERS, STONEMASONS AND CEMENT MASONS.......\$ 24.11 10.07 TILE, MARBLE AND TERRAZZO WORKERS......\$ 22.64 6.05 POSEY, VANDERBURGH AND WARRICK COUNTIES BRICKLAYERS, MASONS.......\$ 28.47 12.89 TILE, MARBLE AND TERRAZZO

8.71 WORKERS.....\$ 23.72

TERRE HAUTE

CLAY, DAVIESS, GIBSON, GREENE, KNOX, MARTIN, PARKE, PIKE, PUTNAM, SULLIVAN, VERMILLION and VIGO COUNTIES

<sup>\*</sup> BRIN0004-010 06/01/2012

<sup>\*</sup> BRIN0004-015 06/01/2012

### Rates Fringes

RRIC	'MT	AYER
DIVING	:NL	MILL

BRICKLAYERS, STONE MASONS

and POINTER/

CLEANER/CAULKER.........\$ 29.40 10.95

CEMENT MASON (GREENE and

SULLIVAN COUNTIES)......\$ 27.05 10.95

CEMENT MASON (REMAINING

COUNTIES)......\$ 27.30 10.85

TERRAZZO FINISHERS......\$ 18.96 6.30 TERRAZZO WORKER.....\$ 29.58 9.93

TILE AND MARBLE FINISHERS...\$ 19.83

TILE LAYER, MARBLE MASON,

MOSAIC WORKER......\$ 28.99 9.83

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### MUNCIE

BLACKFORD, DELAWARE, FAYETTE, FRANKLIN, HAMILTON, HENRY, JAY, MADISON, RANDOLPH, RUSH, TIPTON, UNION and WAYNE COUNTIES

6.32

### Rates Fringes

Bricklayer, Stonemason,

 Pointer, Caulker & Cleaner......\$ 28.05
 12.34

 TERRAZZO FINISHER.......\$ 18.96
 6.30

 TERRAZZO WORKER/SETTER......\$ 29.58
 9

TERRAZZO WORKER/SETTER.........\$ 29.58 9.93 Tile & Marble Finisher.......\$ 19.83 6.32

Tile & Marble Setter; Mosaic

Worker.....\$ 28.99 9.83

### MERRILLVILLE

JASPER, NEWTON & STARKE COUNTIES

### Rates Fringes

Bricklayer, Stone Mason, Marble Mason, Terrazzo Worker, Tile Layer, Pointer,

Tile, Marble & Terrazzo Worker...\$ 35.87 19.55

<sup>\*</sup> BRIN0004-016 06/01/2012

<sup>\*</sup> BRIN0006-001 03/06/2012

### \* BRIN0011-001 06/01/2012

LAFAYETTE
BENTON, CARROLL, CLINTON, FOUNTAIN, TIPPECANOE, WARREN and
WHITE COUNTIES

Rates Fringes

Bricklayer, Stonemason,

 Pointer, Caulker & Cleaner......\$ 27.00
 13.19

 TERRAZZO FINISHER.......\$ 18.96
 6.30

 TERRAZZO WORKER/SETTER.......\$ 29.58
 9.93

 Tile & Marble Finisher.......\$ 19.83
 6.32

 Tile & Marble Setter; Mosaic

CASS, ELKHART, FULTON, GRANT, HOWARD, KOSCUISKO, LAGRANGE, MARSHALL, MIAMI, PULASKI, WABASH

Rates Fringes

Bricklayer, Caulker, Cleaner,

CARPO107-010 04/01/2010

ADAMS, CASS, ELKHART, FULTON, GRANT, HOWARD, HUNTINGTON, KOSCIUSKO, MARSHALL, MIAMI, TIPTON, WABASH AND WELLS COUNTIES:

Rates Fringes

CARPENTER.....\$ 24.53 12.94

CARP0108-002-06/01/2012

BENTON, CARROLL, CLINTON, PULASKI, TIPPECANOE, WARREN AND WHITE COUNTIES

Rates Fringes

CARPENTER......\$ 26.56 15.95

<sup>\*</sup> BRIN0018-002 06/01/2012

### CARPO109-002 04/01/2012

DAVIESS, GIBSON, GREENE, KNOX, LAWRENCE, MARTIN, ORANGE AND SULLIVAN COUNTIES:

Rates Fringes

CARPENTER......\$ 23.93 15.78

CARP0111-002 04/01/2012

BOONE, CLAY, FOUNTAIN, HAMILTON, HANCOCK, HENDRICKS, JOHNSON (Townships of Clark, Camp Atterbury north of Hospital Road, Pleasant, White River), MONROE, MONTGOMERY, MORGAN, OWEN, PARKE, PUTNAM, VERMILLION AND VIGO COUNTIES

Rates Fringes

CARPENTER......\$ 24.76 15.21

CARPO111-003 04/01/2012

BARTHOLOMEW, BROWN, (Camp Atterbury south of Hospital Road), DECATUR, FRANKLIN, JOHNSON (Townships of Blue River, Franklin, Hensley, Needham, Nineveh, Union), RUSH AND SHELBY COUNTIES

Rates Fringes

CARP0111-004 04/01/2012

MARION COUNTY

Rates Fringes

CARPENTER......\$ 25.87 15.21

CARP0111-005 04/01/2012

BLACKFORD, DELAWARE, FAYETTE, HENRY, JAY, MADISON, RANDOLPH, UNION AND WAYNE COUNTIES

Rates Fringes

CARPENTER	\$	24.62	15.21
CARP0232-003 04	1/01/2012		
ALLEN, DEKALB, L	AGRANGE,	NOBLE, ST	EUBEN and WHITLEY COUNTIES
	Rates	Fringes	
CARPENTER	\$	24.70	14.57
CARP0999-001 00	5/01/2012		000000000
JASPER, NEWTON	AND STAR	KE COUNTI	25:
	Rates	Fringes	
CARPENTER	\$	35.42	23.70
CARP0999-002 0	1/01/2012		
CRAWFORD, DUB WARRICK COUNT	=	, PIKE, POSE	EY, SPENCER, VANDERBURGH AND
	Rates	Fringes	
CARPENTER	\$	23.60	15.71
CARP0999-004 0-	4/01/2012		
DEARBÖRN, JÁCK COUNTIES	SON, JENN	INGS, OHIO	, RIPLEY AND SWITZERLAND
	Rates	Fringes	
CARPENTER			15.19
CARP0999-005 0			onevanvion-
CLARK, FLOYD, HA	ARRISON, JI	EFFERSON,	SCOTT AND WASHINGTON COUNTIES
	Rates	Fringes	
CARPENTER	•		15.84
CARP1031-012 0		*******	

### CLARK, FLOYD, HARRISION AND WASHINGTON COUNTIES

Rates Fringes

MILEWRIGHT......\$ 24.65 17.57

ELEC0016-003 10/01/2011

CRAWFORD, DAVIESS, DUBOIS, GIBSON, LAWRENCE, MARTIN, ORANGE, PERRY, PIKE, POSEY, SPENCER, VANDERBURGH, WARRICK

Rates Fringes

ELECTRICIAN......\$ 33.47 13.77

ELEC0071-006 01/16/2012

DEARBORN, OHIO, and SWTIZERLAND COUNTIES

Rates Fringes

Line Construction:

Equipment Operator........\$ 29.03 10.65
Groundman.......\$ 20.96 9.40
Lineman & Cable Splicers....\$ 32.25 11.77

ELEC0153-003 03/01/2012

ELKHART, KOSCIUSKO and MARSHALL COUNTIES

Rates Fringes

 Communication Technician......\$ 24.58
 12.05

 EEECTRICIAN......\$ 30.25
 17.81

Includes the installation, operation, inspection, modification, maintenance and repair of systems used for the transmission and reception of signals of any nature, for any purpose, including but not limited to, sound and voice transmission/transference systems, communication systems that transmit or receive information and /or control systems, television and video systems, micre-processor controlled fire alarm systems, and security systems and the performance of any task directly related to such installation or service. The scope of work shall exclude the installation of electrical power wiring and the

installation of conduit raceways exceeding fifteen (15) feet in length.		
ELEC0212-009 05/28/2012		
DEARBORN, OHIO, and SWITZERLAND COUNTIES		
Rates Fringes		
ELECTRICIAN\$ 26.11 15.42		
ELEC0305-003 01/01/2012		
ADAMS, ALLEN, DE KALB, HUNTINGTON, NOBLE, STEUBEN, WELLS, and WHITLEY COUNTIES		
Rates Fringes		
ELECTRICIAN\$ 29.98 13.56		
ELEC0369-005 05/30/2012		
CLARK, FLOYD, and HARRISON COUNTIES		
Rates Fringes		
ELECTRICIAN		
Groundman		
ELEC0481-003 01/01/2009		
BARTHOLOMEW, BOONE, DECATUR, HAMILTON, HANCOCK, HENDRICKS, JENNINGS, JOHNSON, MADISON, MARION, MONTGOMERY, MORGAN, PUTNAM, RIPLEY, RUSH AND SHELBY COUNTIES		
Rates Fringes		
ELECTRICIAN\$ 31.45 14.74		
ELEC0668-002 06/01/2012		
BENTON, CARROLL, CASS, FULTON, TIPPECANOE and WHITE COUNTIES		

INDIANA FINANCE AUTHORITY EAST END CROSSING 421634

Rates

ATTACHMENT 3 TO EXHIBIT 23 Page 12 of 64

Fringes

December 27, 2012 PUBLIC-PRIVATE AGREEMENT ATTACHMENT 3 TO EX 23 FEDERAL PREVAILING WAGE RATE ELECTRICIAN......\$30.90 14,99 FOOTNOTE: a. PAID HOLIDAYS: New Years Day, Memorial Day, July 4th, Labor Day, Veterans Day Thanksgiving Day and Christmas Day \* ELECO702-003 07/02/2012 DUBOIS, GIBSON, PERRY, PIKE, POSEY, SPENCER AND VANDERBURGH COUNTIES Rates Fringes Line Construction: GROUNDMAN, Class A..........\$ 23.79 12.66 GROUNDMAN-EQUIPMENT OPERATOR (All other equipment)......\$ 30.16 14.51 **HEAVY-EQUIPMENT OPERATOR** (All crawler type equipment D-4 and larger)...\$ 34.40 LINEMAN.....\$ 41.91 17.91 المستقامة المستقامة والمستقامة المستقام والمستقام والمستقام والمست ELEC0725-003 01/01/2011 CLAY, GREENE, OWEN, PARKE, SULLIVAN AND VIGO COUNTIES Rates Fringes ELECTRICIAN.....\$ 33.15 23%+\$5.64 ELEC0725-007 09/01/1999 CLAY, GREENE, OWEN, PARKE, SULLIVAN AND VIGO COUNTIES Rates Fringes Communication Technician......\$ 18.70 3.80+3% Includes the installation, operation, inspection, maintenance, repair and service of radio, television, recording, voice sound and vision production and reproduction apparatus, equipment and appliances used for

\_\_\_\_\_\_

domestic, commercial, education, entertainment and private

telephone systems.

### ELEC0855-001 06/01/2012

### FAYETTE, FRANKLIN, HENRY, RANDOLPH, UNION AND WAYNE COUNTIES

Rates Fringes

ELECTRICIAN......\$ 32.37 12.24

ELEC0873-002 03/01/2012

CLINTON, GRANT, HOWARD, MIAMI, TIPTON AND WABASH COUNTIES:

Rates Fringes

ÉLECTRICIAN......\$ 32.03 11.75

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ELEC1393-001 12/06/2010

REMAINING COUNTIES

Rates Fringes

Line Construction:

**EQUIPMENT OPERATOR** 

(Backhoes over 1/2 yard

bucket capacity, cranes

rated at 15 ton or more.

capacity) 95% J.L. rate.....\$ 32.00 4.75+27.75%

GROUNDMAN TRUCK DRIVER.....\$ 21.51 4.75+27.75%

GROUNDMAN, EQUIPMENT

OPERATOR: Diggers, 5th

wheel type trucks, crawler

type, D-4 and smaller,

bucket trucks and live

boom type line trucks......\$ 24.67 4.75+27.75%

GROUNDMAN......\$ 18.69 4.75+27.75%

LINEMAN.....\$ 32.00 4.75+27.75%

ELEC1393-002 12/06/2010

**NEWTON COUNTY** 

Rates Fringes

Line Construction:

EQUIPMENT OPERATOR (Backhoes over 1/2 yard bucket capacity, cranes

rated at 15 ton or more capacity) 95% J.L. rate.....\$ 32.00 4.75+27.75% GROUNDMAN TRUCK DRIVER.....\$ 21.51 4.75+27.75% GROUNDMAN, EQUIPMENT OPERATOR: Diggers, 5th wheel type trucks, crawler type, D-4 and smaller, bucket trucks and live boom type line trucks......\$ 24.67 4.75+27.75% GROUNDMAN........\$ 18.69 4.75+27.75% LINEMAN.........\$ 32.00 4.75+27.75%

ENGI0103-003 04/01/2012

### INCLUDING UNDERGROUND AND UTILITY CONSTRUCTION

### REMAINING COUNITES

### Rates Fringes

### Power equipment operators:

GROUP 1	.,\$	30.25	14.40
GROUP 2	\$	28.53	14.40
<b>GROUP 3</b>	\$	27.61	14.40
<b>GROUP 4</b>	\$\$	26.11	14.40

### POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Air compressors in manifold with throttle valve; Asphalt plant engineer; Auto grade or similar type machine; Auto patrol; Backhoe or farm-type tractor, 45 hp and over; Ballast regulator (RR); Bituminous mixer; Bituminous paver; Bituminous plant engineer; Bulldozer; Caisson drilling machine; Cherry picker, 15 ton or over; Chip spreader; Concrete mixer 21 cu. ft. or over; Core drifling machine; Crane or derrick with any attachment (including clamshell, dragline, shovel, backhoe, etc.); Dredge engineer; Dredge operator; Drilling machine on which the drill is an integral part; Earth mover, rubber-tired (paddle wheel, 616, 631, TS-24 or similar type); Earth mover, rubber-tired, tandem (\$0.50 per hour additional for each bowl): Elevating grader; Fork lift, 10 ton or over; P.C.C. formless paver post driver; Highlift shovel, 1.1/2 cu. yd. or over; Hoist, 2 drums and over; Helicopter, crew; Hydraulic boom truck; keystone, skimmer scoop; Loader, self-propelled (belt, chain, wheel); Locomotive operator; Mechanic; Mucking machine; Panel board concrete plant, central mix type; Paver, Hetherington; Pile driver, skid or crawler; Road

paving mixer; Rock breaking plant; Rock crushing plant, portable; Roller (asphalt, waterbound macadam, bituminous macadam, brick surface); Roller with dozer blade; Root rake, tractor-mounted; Self-propelled widener; Stump remover, tractor-mounted; Surface heater and planer; Tandem push tractor (\$0.50 per hour additional); Tractor, boom; Winch or hoe head; Tractor, push; Tractor with scoop; Tractor-mounted spreader; Tree mover; Trench machine, over 24"; Tug boat operator; Well drilling machine; Winch truck with A-frame

GROUP 2: Air compressor with throttle valve or clever brooks-type combination; Backfiller; Backhoe on farm-type tractor, under 45 hp; Bull float; Cherry picker under 15 ton; Chip spreader, self-propelled; Concrete pump; Concrete mesh depressor, independently operated; Concrete spreader, power-driven; End loader under 1 1/2 cu. yd.; Excavating loader, portable; Finishing machine and bull float; Gunite machine; Head greaser; Mesh or steel placer; Multiple tamping machine (RR); P.C.C. concrete belt placer; Pull grader, power control; Refrigerating machine, freezing operation; Ross carrier; Sheepfoot roller (self-propelled); Tamper (multiple vibrating, asphalt, waterbound macadam, bituminous macadam, brick surface); Trench machine, 24" and under; Tube float; Welder

GROUP 3: Assistant plant engineer; Base paver (Jersey or similar type machine); Concrete finishing machine; Concrete mixer, less than 21 cu. ft.; Curb machine; Farm tractor, including farm tractor with all attachments except backhoe and including high lift end loaders of 1 cu. yd. capacity or less; Fire tender on boiler; Hoist, 1 drum; Operator, 5 pieces of minor equipment; Paving breaker; Power broom, self-propelled; Roller, earth and sub-base material; Slurry seal machine; Spike machine (RR); Tamper (multiple vibrating, earth and sub-base material); Throttle valve and fire tender combination on horizontal or upright boiler; Tractaire with drill; Tractor, 50 h.p. or over; Well point system; Widener, APSCO or similar type

GROUP 4: Air compressor; Assistant to engineer, oiler; Automatic dry batch plant; Bituminous distributor; Bituminous patching tamper; Belt spreader; Broom and belt machine; Chair cart, self-propelled; Coleman-type screen; Conveyor, portable; Digger post hole, power-driven; Fork lift, under 10 ton; Form grader; Form tamper, motor-driven; Generator; Hetherington driver; Hydra seeder; Operator, 1 through 4 pieces of minor equipment; Outboard or inboard

motor boat; Power curing spraying machine; Power saw, concrete, power-driven; Pug mill; Pull broom, power-type; Seaman tiller; Straw blower or brush mulcher; Striping machine paint, motor-driven; Sub grader; Tractaire, tractor, below 50 h.p.; Truck crane oiler, driver; Spreader; Water pump; Welding machine, 2 of 300 amps or over

ENGI0150-009 04/01/2012

HEAVY, HIGHWAY AND RAILROAD CONSTRUCTION

ELKHART, FULTON, JASPER, KOSCIUSKO, LAGRANGE, MARSHALL, NEWTON, NOBLE, PULASKI, and STARKE COUNTIES

## Rates Fringes

## Power equipment operators:

GROUP 1	\$ 28.60	20.10
GROUP 2	\$ 27.00	20.10
GROUP 3	\$ 25.70	20.10
GROUP 4	\$ 24.30	20.10
GROUP S	\$ 21.05	20.10

### POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Air compressors in manifold with throttle valve;

Asphalt plant engineer; Auto grade or similar type machine;

Auto patrol; Automatic Sub-Grade; Backhoe or farm type

tractor, 45 hp and over; Ballast regulator (RR); Barrier

Wall Machine; Batch Plants (Concrete & Asphalt); Bituminous mixer; Bituminous paver; Bituminous plant

engineer; Boring Machine; Bulldozer; Caisson drilling

machine; Cherry picker, 15 ton or over; Chip spreader;

Concrete mixer, 21 cu. ft. or over; Concrete Belt Placer;

Concrete Paver; Concrete Pump (Truck Mounted); Concrete Saw

(track mounted); Concrete Spreader (power driven); Core

drilling machine; Crane or derrick with any attachment

(including clamshell, dragline, shovel, backhoe, etc.);

Curb Machine; Gutter Machine; Dredge engineer; Dredge

operator; Drilling machine on which the drill is an

integral part; Earthmover, rubber-tired (paddle wheel, 616,

631, TS-24 or similar type); Earthmover, rubber-tired,

tandem (.50 per hr. additional for each bowl); Elevating

Grader; Forklift (10 ton or over); P.C.C. Formless Paver;

Gradall; Gravel Processing Plant (portable); Operator of

Guard Rail Post Driver; Highlift Shovel 1-1/2 cu. yd. or

over) Frame; Hoist (2 drum & over); Helicopter crew;

Hydraulic boom truck; Hydraulic Excavator; Loaded-Self propelled (belt chain wheel); Laser Screed; Locomotive operator; Mechanic; Mucking machine; P.C.C. Concrete Belt Placer; Panel board concrete plant (central mix type); Paver (Hetherington); Pavement Breaker; Pile driver, skid or crawler; Road paving mixer; Rock breaking plant; Rock crushing plant (portable); Roller (asphalt, waterbound macadam, bituminous macadam, brick surface); Roller with dozer blade; Road Widener; Root rake (tractor-mounted); Roto Mill Grinder; Self-propelled widener; Stump remover; Surface heater and planer; Tandem push tractor (\$0.50 per hour additional); Tractor, boom; Winch or hoe head; Tractor (push): Tractor with scoop; Tractor-mounted spreader; Tree mover; Trench machine, over 24"; Tug boat operator; Well drilling machine; Widener (Apsco or similar type); Winch truck with A-frame

GROUP 2: Air compressor with throttle valve or Clever Brooks type combination; Backfiller; Farm type tractor (under 45 H.P.); Cherry picker under 15 ton; Chip spreader (self-propelled); Concrete pump (trailer type); Concrete mesh depressor, independently operated; End loader under 1 1/2 cu. yd.; Excavating loader (portable); Finishing machine and bull float; Gunite machine; Hydraulic Power unit; Head greaser; Mesh or steel placer; Multiple tamping backhoe on machine (RR); Bull float (bidwell Machine); Refrigerating machine-operation; Ross Carrier; Sheepfoot roller (self-propelled); Tamper-Multiple Vibrating (Asphalt, Waterbound, Macadam, Bitumínous Macadam, Brick Surface); Trench machine (24" and under); Tube float; Water Pull/Wagon; Welder

GROUP 3: Plant engineer; Base paver (Jersey or similar type machine); Concrete finishing machine; Concrete mixer, less than 21 cu. ft.; Curb machine; Farm tractor, including farm tractor with all attachments except backhoe and including high lift end loaders of 1 cu. yd. capacity or less; Fireman, on boiler; Hoist, 1 drum; Operator, 3-5 pieces of minor equipment; Paving breaker; Power broom, self-propelled; Roller, earth and sub-base material; Power Saw-Concrete (Power Driven); Slurry seal machine; Spike machine (RR); Sub-surface Material Distributor; Tamper (multiple vibrating, earth and sub-base material); Throttle valve; Throttle Valve and fireman combination on horizontal or upright boiler; Tractaire with drill; Well Point

GROUP 4: Air compressor; Assistant to engineer, oiler; Bituminous patching tamper; Belt spreader; Broom and belt

machine; Chair cart, self-propelled; Coleman-type screen; Conveyor, portable; Deck-hand Digger post hole, power-driven; Forklift, under 10 ton; Form grader; Form tamper, motor-driven; Generator; Hetherington driver; Hydra seeder; Mechanic heater; Operator, 2 pieces of minor equipment; Outboard or inboard motor boat; Power curing spraying machine; Pug mill; Pull broom, power type; Seaman tiller; Skid steer loader over 3/4 cu, yd.; Straw blower or brush mulcher; Striping machine paint, motor-driven; Sub-grader; Tractaire; Tractor, below 50 h.p.; Truck crane oiler; Spreader; Water pump

GROUP 5: Skid steer loader under 3/4 cu. yds.

ENGI0150-039 06/01/2012

UNDERGROUND & UTILITY CONSTRUCTION:

JASPER, NEWTON, PULASKI AND STARKE COUNTIES:

Rates Fringes

## Power equipment operators:

GROUP 1	\$ 38:45	24.93
GROUP 2	\$ 37.65	24.93
GROUP 3	\$ 33.35	24.93
GROUP 4	\$ 31.15	24.93

# POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Mechanic; Asphalt plant; Autograde; Batch plant; Benoto (requires 2 engineers); Boiler and throttle valve; Boring machine (mining machine); Caisson rigs; Central Redi-mix plant; Combination backhoe-endloader with backhoe bucket over 1/2 cu. yd.; Combination tugger hoist and air compressor; Compressor and throttle; Concrete breaker (truck-mounted); Concrete conveyor; Concrete paver over 27E cu. ft.; Concrete paver 27E cu. ft. and under; Concrete pump with boom (truck-mounted); Concrete tower; Cranes and backhoes, all attachments; Cranes, Hammerhead tower; Creter cranes; Derricks, all; Derricks, traveling; Forklift, Jull type; Forklift, 10 ton and over; Hoists, 1, 2 and 3 drum; Hoist, 2 tugger - one floor; Hydraulic boom truck; Locomotives, all; Motor patrol; Mucking machine; Pile driving and skid rig; Pit machines; Pre-stress machines; Pumperete and similar types; Rock drill, self-propelled; Rock drill, truck-mounted; Slip form paver; Straddle buggies; Tractor with boom and side boom; Trenching

## machine; Winch tractors

GROUP 2: Asphalt spreader; Boilers; Bulldozers; Combination backhoe-endloader with backhoe bucket 1/2 cu. yd. and under; Engineer acting as conductor in charge of crew; Grader, elevating; Greaser engineer; Grouting machines; Highlift shovels or front endloader; Hoists, automatic; Corboy drilling machines; Hoists, all elevators; Hoists, tugger, single drums; Post hole digger; Roller, all; Scoops, tractor-drawn; Stone crushers; Tournapull; Winch trucks

GROUP 3: Concrete mixer (2 bag and over); Conveyor, portable; Steam generators; Tractor, farm and similar type; Air compressor, small, 150 and under, 1 to 5 not to exceed a total of 300 ft.; Air compressor, large, over 150; Combination, small equipment operator; Forklift, under 10 ton; Generator; Pump, 1 to 3 not to exceed a total of 325 ft.; Pumps; Well points; Welding machines (2 through 5); Winches, 4 electric drill winches.

GROUP 4: Heater, mechanical (1 to 5); Oilers; Switchmen

ENGI0181-014 04/01/2012

HEAVY AND HIGHWAY CONSTRUCTION:

BARTHOLOMEW, BROWN, CLARK, CRAWFORD, DEARBORN, DECATUR, DUBOIS, FLOYD, FRANKLIN, GIBSON, HARRISON, JACKSON, JEFFERSON, JENNINGS, LAWRENCE, MARTIN, OHIO, ORANGE, PERRY, PIKE, POSEY, RIPLEY, SCOTT, SPENCER, SWITZERLAND, VANDERBURGH, WARRICK, and WASHINGTON COUNTIES

Rates Fringes

# Power equipment operators:

GROUP A	\$ 29.70	13.00
GROUP 8	\$ 27.05	13.00
GROUP C	\$ 24.92	13.00

### POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP A: Air compressor in manifold with throttle valve; Asphalt plant engineer; Auto grade or similar type machine; Bituminous mixer; Bituminous paver; Bituminous plant engineer; Bulldozer; Caisson drilling machine; Cherry picker, all; Ballast regulator (RR); Chip spreader,

self-propelled; Cold grinder or similar type equipment) Concrete mixer, 21 cu. ft. or over; Concrete pump, truck-mounted; Core drilling machine; Crane or derrick with any attachment (including clamshell, dragline, shovel, backhoe, etc.); Dredge operator; Orilling machine on which the drill is an integral part; Earth mover, rubber-tired, tandem 0.50 per hour additional; Elevating grader; Endloader, Hi-lift shovel; P.C.C. formless paver; Gradali; Gravel processing plant, portable; Guardrail post driver operator; Head greaser; Hi-lift shovel, endloader; Hoist (2 drums and over); Helicopter crew; Hydraulic boom truck, Keystone, Skimmer Scoop; Loader, self-propelled (belt, chain wheel); Locomotive operator; Mechanic; Mucking machine; Multi-bank drill operator; Panel board concrete plant, central mix type; Paver, Hetherington; Pile driver, skid or crawler; Road paving mixer; Rock breaking plant; Rock crushing plant, portable; Roller (asphalt, waterbound, macadam, bituminous macadam, brick surface); Roller, with dozer blade; Root rake, tractor-mounted; Stump remover, tractor- mounted; Surface heater and planer; Tandem push tractor, \$0.50 per hour additional; Tractor, boom winch or hoe head; Tractor, push; Tractor with scoop; Tractor-mounted spreader; Tree mover; Trench machine, over 24"; Tug boat operator; Welder; Well drilling machine; Self-propelled widener.

GROUP B: Air compressor with throttle valve or clever brooks-type combination; Backfiller, base paver, Jersey or similar type machine; Bull float; Concrete finishing machine; Concrete mesh depressor, independently operated; Concrete spreader, power-driven; Dredge engineer; Excavator loader, portable; Fire tender on boiler; Forklift, regardless of ton; Hoists, 1 drum; Mesh or steel placer: Minor equipment operator, 5 pieces; Multiple tamping machine (RR); P.C.C. concrete placer; Paving breaker; Power broom, self-propelled; Pull grader, power-controlled; Refrigerating machine, freezing operation; Roller, earth and sub-base material; Ross carrier (Straddle buggy); Sheepfoot roller, self-propelled without blade; Tamper, multiple\vibrating (asphalt, waterbound macadam, bituminous macadam, brick surface); Tamper, multiple vibrating (earth and sub-base material); Trench machine, 24" and under; Tube float; Well point system; Widener, Apsco or similar type; Winch truck with A-frame.

GROUP C: Air compressor, oiler; Automatic dry batch plant; Bituminous distributor; Bituminous patching tamper; Belt

spreader; Broom and belt machine; Brush burner; Chair cart, self- propelled; Coleman-type screen; Cold grinder oiler; Concrete mixer, less than 21 cu. ft.; Conveyor, portable; Curb machine; Deckhand; Digger (post hole, power-driven); Farm tractor, including farm tractor with all attachments (except backhoe, Hi- lift endloaders); Form grader; Form tamper, motor-driven; Generator; Gunite machine; Hetherington driver; Hydra seeder; Mechanical heater; Minor equipment operator, 1 through 4 pieces; Curing spraying machine; Power saw, concrete (power-driven); Pug mill pull broom, power type; Seaman tiller; Slurry seal machine; Spike machine; Straw blower or brush mulcher; Stripping machine (paint, motor-driven); Sub grader; Throttle valve; Tractaire with drill; Truck crane and multi-drill oiler, driver; Spreader; Water pump.

ENGI0181-015 04/01/2012

#### SEWER WATERLINE & UTILITY CONSTRUCTION:

BARTHOLOMEW, BROWN, CLARK, CRAWFORD, DEARBORN, DECATUR, DUBOIS, FLOYD, FRANKLIN, GIBSON, HARRISON, JACKSON, JEFFERSON, JENNINGS, LAWRENCE, MARTIN, OHIO, ORANGE, PERRY, PIKE, POSEY, RIPLEY, SCOTT, SPENCER, SWITZERLAND, VANDERBURGH, WARRICK, and WASHINGTON COUNTIES

Rates Fringes

Power equipment operators:

GROUP A......\$ 29.38 13.40 GROUP B......\$ 21.25 13.40

### SEWER WATERLINE & UTILITY CONSTRUCTION

GROUP A: A-frame winch truck; Air compressor 900 cu. ft. and over; Air tugger; Autograde (CMI); Auto patrol; Backhoe; Ballast regulator (RR); Batch plant (electrical control concrete); Bending machine (pipe); Bituminous plant (engineer); Bituminous plant; Bituminous mixer travel plant; Bituminous paver; Bituminous roller; Buck hoist; Bulldozer; Cableway; Chicago boom; Clamshell; Concrete mixer, 21 cu. ft. or over; Concrete paver, concrete pump, crete; Crane; Craneman; Crusher plant; Derrick; Derrick boat; Dinky; Dope pots (pipeline); Dragline; Dredge operator; Dredge engineer; Drill operator; Elevator grader; Elevator; Ford hoe, or similar type equipment; Forklift; Formless paver; Gantry crane; Gradall; Grademan; Hopto;

Hough loader or similar type; Hydro crane; Motor crane; Mucking machine; Multiple tamping machine (RR); Overhead crane; Pile driver; Pulls; Push dozer; Push boats; Roller (sheep foot); Ross Carrier; Scoop; Shovel; Side boom; Swing crane; Trench machine; Welder (heavy duty; Truck-mounted concrete pump; Truck-mounted drill; Well point; Whirleys.

GROUP B: Air compressor, up to 900 cu. ft.; Brakeman; Bull float; Concrete mixer, over 10S and under 21S; Concrete spreader or puddler; Deck engine; Electric vibrator compactor (earth or rock); Finishing machine; Fireman; Greaser, on grease facilities servicing heavy equipment; Material pump; Motor boats; Portable loader; Post hole digger; Power broom; Rock roller; Roller, wobble wheel (earth and rock); Spike machine (BR); Seaman tiller; Spreader rock; Sub grader; Tamping machine; Welding machine; Widener, Apsco or similar type: Bituminous distributor; Cement gun; Concrete saw; Conveyor; Deckhand oiler; Earth roller; Form grader; Generator; Guard rail driver; Heater; JLG lifts; Oiler; Paving joint machine; Power traffic signal; Scissor lift; Steam Jennyu; Truck crane oiler; Vibrator; Water pump.

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ENGI0841-011 04/01/2012

HEAVY, HIGHWAY AND UTILITY CONSTRUCTION

BOONE, CLAY, DAVIESS, FOUNTAIN, GREENE, HENDRICKS, KNOX, MONROE, MONTGOMERY, MORGAN OWEN, PARKE, PUTNAM, SULLIVAN, VERMILLIAN, VIGO, and WARREN COUNTIES

Rates Fringes

Power equipment operators:

GROUP 1......\$ 29.25 16.00+a GROUP 2......\$ 23.00 16.00+a

### POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Air Compressor Over 600 CU FT, Air Compressors (2), Compressors hooked in Manifold, Asphalt Plant Engineer, Auto Grade and/or C.M.I. or similar type Machine, Auto Patrol, Motor Patrol, Power Blade, Aspco Paver, Asphalt Planer, Asphalt Rollers, Asphalt Paver Operator, Concrete or Asphalt Milling Machine, Self Propelled Widener, Backhoe and/or Pavement Breaker Attachment, Self Propelled Pavement Breaker, Ballast Regulator (R.R.), Bituminous Mixer,

Bituminous Paver, Bituminous Plant Engineer, Bulk Cement Plant Engineer, Bulldozer, One Drum Hoist with Tower or Boom, Cableways, Tower Machines, Back Filler, Boom Tractor, Boom or Winch Truck, Winch or Hydraulic Boom Truck, Boring Machine, Boiler Operator, Brush Mulcher, Bull Float, Finishing Machine, Power Cranes, Overhead Cranes, Truck cranes, Piledriver, Skid or Crawler, Guard Rail Post Driver, Tower Cranes, Hydro Crane, Cherry Picker, Draglines, Derricks, Shovels, Clam, Gradalls, Two Drum Machine, Concrete or Asphalt Curb Machine, Self Propelled, Concrete Mixers with Skid, Tournamixer, Concrete Pump (Truck or Skid Mounted), Concrete Plant Engineer, Soil Cement Machine, Formless Paver, Concrete Spreader, Span Saw (and similar types), Chip Spreader, Mesh Placer, Dredging Equipment or Dredge Engineer or Dredge Operator, Tug Boat Operator, Marine Scoops, Ditching Machine with Dual Attachment, Standard or Dinkey Locomotives, Drilling Machine, including Well Testing, Caissons, Shaft or any similar type Drilling Machine (Well Point Systems), 4 Point Life System (Power Lift or similar type), Mud Cat, Mucking Machine, Sull-Air, Mechanics, Welder, Head Equipment Greaser, Tournapull, Tractor Operating Scoops, Push Tractors, Large Rollers on Earth, Loaders (Track or Rubber Mounted), or similar type Machine, Lull, Tournadozer, Scoopmobiles, Elevating Machines, Power Broom (Self Propelled), Power Sub Grader, Hydra Ax, Farm Tractor with Attachments, Soil Stabilizer (Seaman Tiller, Bo mag, Rago Gator and similar types of equipment), Tree Mover, Stump Remover, Root Rake, Hydra Seeder, Straw Blower, Refrigerating Machine, Freezing Operator, Chair Cart-Self Propelled, Helicopter Crew (3), Ross Carrier or Straddle Buggy or similar Machine, Rock Crusher Plant, Gravel Processing Machine, Pipe Cleaning Machine, Pipe Wrapping Machine, Pipe Bending Machine, Pug Mill, Concrete Bump Grinder Machine, Power Curing Spray Machine, Forklift (except when used for landscaping), Snooper Truck Operator.

GROUP 2: Air Compressor 600 cu. ft. and under, Air Tugger, Air Valves, Assistant Concrete Plant Engineer, Assistant Asphalt Plant Engineer, Asphalt Plant Engineer, Bulk Cement Plant Equipment Greaser, Concrete Mixers without Skips, Curbing Machine, Concrete Saw (Self Propelled), Conveyors, Cement Blimps, Ditching Machine under 6", Distributor Operator On trucks, Deck Hands, Elevators when used for hoisting material, Engine Tenders, Fork Lift (when used for landscaping), Farm Tractor, Fireman, Fireman on Paint or Dope Pots, Form Tamper, Form Grader, Flex Plane, Generators (two to four), or Welding Machines or Water

Pumps, within 400 feet, Gunite Machine, Machine Mounted Post Hole Digger, Mude Jack, One Drum Machines without Tower or Boom, One Water Pump, One Welding Machine, Outboard or Inboard Motor Boat, Pull Broom (Power Type, Siphons and Pulsometer, Switchman, Striping and or Painting Machine (motor driven), Slurry Seal Machine, Track Jack, Temporary Heat, Throttle Valve, Tube Float, Tractaire, Wagon Drill, Multiple Tamping Machine (R.R.), Spike Machine (R.R.), Mechanical Heaters, Brush Burner, Vacuum Truck (Super Sucker and similar types).

### FOOTNOTES:

- A. Employees operating booms from 149 Ft. to 199 Ft. including jib, shall receive an additional seventy-five Cents (.75) per hour above the rate. Employees operating booms over 199 Ft. including jib, shall receive an additional one dollar and twenty- five cents (\$1.25) per hour above the regular rate.
- B. Employees operating scoops, pulls, or tractors hooked in tandem shall receive an additional one dollar (\$1.00) per hour above the regular rate.
- C. Employees operating scoops, pulls, or tractors pulling any other hauling unit in tandem shall receive an additional one dollar (\$1.00) per hour above the regular rate.
- D. Underground work Employees working in tunnels, shafts, etc. shall be paid a thirty percent (30%) premium above the wage rate.

IRON0022-001 06/01/2012

BARTHOLOMEW, BENTON (REMAINDER OF COUNTY), BOONE, BROWN, CARROLL, CASS, CLAY, CLINTON, DAVIESS (REMAINDER OF COUNTY), DECATUR (W 3/4), DELAWARE (REMAINDER OF COUNTY), FAYETTE (W 1/3), FOUNTAIN, FRANKLIN (NW TIP), FULTON (REMAINDER OF COUNTY), GRANT (REMAINDER OF COUNTY), GREENE, HAMILTON, HANCOCK, HENDRICKS, HENRY, HOWARD, JACKSON, JASPER (SOUTHEASTERN 1/3), JENNINGS (NORTHWEST 2/3), JOHNSON, KNOX (REMAINDER OF COUNTY), LAWRENCE, MADISON, MARTIN (NW 2/3), MIAMI (REMAINDER OF COUNTY), MONROE, MONTGOMERY, MORGAN, NEWTON (SOUTHERN HALF), OWEN, PARKE, PULASKI (REMAINDER OF COUNTY), PUTNAM, RANDOLPH (SW TIP), RUSH (REMAINDER OF COUNTY), SHELBY, SULLIVAN, TIPPECANOE, TIPTON, VERMILLION, VIGO, WAYNE, WARREN AND WHITE COUNTIES:

Rates Fringes

IRON0044-010 06/01/2012

DEARBORN, DECATUR (REMAINDER OF COUNTY), FAYETTE (REMAINDER OF COUNTY), FRANKLIN (REMAINDER OF COUNTY), JEFFERSON (REMAINDER OF COUNTY), JENNINGS (REMAINDER OF COUNTY), OHIO, RIPLEY, RUSH (SOUTHEASTERN TIP), SWITZERLAND, AND UNION (SOUTHERN 1/3)

Rates Fringes

Ironworkers:

Detail Office 5:	
FENCE ERECTORS\$ 22.50	18.10
ORNAMENTAL\$ 24.80	18.10
STRUCTURAL, MACHINERY	
MOVERS, RIGGERS\$ 24.80	18.10

IRON0070-002 06/01/2012

CLARK, CRAWFORD, FLOYD, HARRISON, JACKSON (SOUTHERN 3/4); JEFFERSON (EXCLUDING NORTHEASTERN TIP); JENNINGS (SOUTHERN 3/4), LAWRENCE (SOUTHERN 2/3), MARTIN (SOUTHEASTERN 2/3), ORANGE, PERRY (EASTERN 3/4); SCOTT AND WASHINGTON COUNTIES:

Rates Fringes

DAVIESS (5 1/2), DUBOIS, GIBSON, KNOX (S 1/2), MARTIN (SW 1/3), PERRY (W 1/4), PIKE, POSEY, SPENCER, VANDERBURGH, AND WARRICK

Rates Fringes

IRONWORKER......\$ 27.02 15.755

IRON0147-004 06/01/2012

ADAMS, ALLEN, BLACKFORD, DEKALB, DELAWARE (NORTHEAST THIRD OF COUNTY), FULTON (EASTERN PART), GRANT (EXCLUDING SOUTHWEST

<sup>\*</sup> IRON0103-001 04/01/2012

PORTION), HUNTINGTON, JAY, MIAMI (NORTHEAST HALF), NOBLE (EXCLUDING NORTHEAST TIP), STEUBEN, WABASH, WELLS, and WHITLEY COUNTIES

Rates Fringes

IRONWORKER......\$ 24.64 18.32

IRON0290-004 06/01/2012

FAYETTE (NE 1/4), RANDOLPH (S. PART OF COUNTY EXCLUDING WINCHESTER BUT INCLUDING UNION CITY) UNION (NORTHERN 2/3) AND WAYNE (REMAINDER OF COUNTY) COUNTIES

Rates Fringes

Ironworkers:......\$ 26.23 18.15

IRON0292-005 06/01/2012

EEKHART, FULTON (North 2/3), KOSCIUSKO (Remainder of County), LAGRANGE (West 1/3), MARSHALL, MIAMI (Northwestern Tip), NOBLE (Northwestern Tip), PULASKI (Northeast Half), and STARKE COUNTIES

Rates Fringes

IRON0372-007 06/01/2012

DEARBORN, DECATUR (REMAINDER OF COUNTY), FAYETTE (SE CORNER), FRANKLIN (S 3/4), OHIO, RIPLEY (REM. OF COUNTY), SWITZERLAND (REMAINDER OF COUNTY) and JENNINGS (NE TIP) COUNTIES

Rates Fringes

IRONWORKER (Reinforcing)

Beyond 25 miles of

Hamilton County, Ohio

Within 25 miles of

Hamilton County, Ohio

Court House.....\$ 26.34 18.58

INDIANA FINANCE AUTHORITY EAST END CROSSING 421034 ATTACHMENT 3 TO EXHIBIT 23
Page 27 of 64

December 27, 2012
PUBLIC-PRIVATE AGREEMENT
ATTACHMENT 3 TO EX 23
FEDERAL PREVAILING WAGE RATE

IRON0395-002 06/01/2012

JASPER (NORTHERN 1/2), NEWTON (NORTHERN 1/2), PULASKI (NORTHWESTERN TIP) COUNTIES

Rates

Fringes

Ironworkers:

IRONWORKERS......\$ 38.00 23.74 SHEETER.....\$ 38.25

IRON0465-002 06/01/2008

BENTON (NORTHWESTERN TIP), JASPER (REMAINDER OF COUNTY), NEWTON (REMAINDER OF COUNTY)

Rates

Fringes

24.03

LABO0041-005 04/01/2012

UTILITY CONSTRUCTION

JASPER AND NEWTON COUNTY

Rates

Fringes

Laborers:

GROUP 1\$ 29.07	11.70
GROUP 2\$ 29.37	11.70
GROUP 3\$ 30.07	11.70

## LABORERS CLASSIFICATIONS (UTILITY CONSTRUCTION)

GROUP 1: Construction laborer; Fence erector; Flagger; Grade checker; Guard rail erector; Wire mesh layer; Joint man (mortar, mastic and all other types); Lighting installer (permanent or temporary); Lineman for automatic grade maker on paving machines; Mortar man; Multi-plate erector; Rip-rap installer (all products and materials); Road marking and delineation laborer; Setting and placing of all precast concrete products; Sign installation including supporting structure; Spraying of all epoxy, curing compound, or like material; sod layer; Air tool, power

tool, and power equipment operator; Asphalt lute man; Asphalt raker man; Batch truck dumper; Bridge handrail erector; Handler (bulk or bag cement); Chain saw man; concrete puddler; concrete rubber; Concrete saw operator; Core drill operator, eye level; Hand blade operator; Hydro seeder man; Motor-driven Georgia buggy operator; Power-driven compactor or tamper operator; Power saw operator; Pumpcrete assembly man; Screed man or screw man on asphalt paver; Rebar installer; Sandblaster man; Sealer applicator for asphalt (toxic); Setting and placing prestressed or precast concrete structural members; Side rail setter (for sidewalks, side ditches, radii, and pavements); Spreader box tender (manual or power-driven); Straw blower man; Subsurface drain and culvert pipe layer; Transverse and longitudinal hand bull float man; Concrete conveyor assembly man; Horizontal boring and jacking man; Jackman and sheetman; Pipe grade man; Winch and windlass operator

GROUP 2: Cutting torch burner; Laser beam aligner; Manhole erector; Sewer pipe layer; Water line installer, temporary or permanent; Welder (electric or oxy-acetylene) in connection with waterline and sewer work, Hod Carrier (tending bricklayers); TVing and associated grouting of utility lines

GROUP 3: Air track and wagon drillman; Concrete barrier rail form setter; Dynamite and powder man; General leadman; Concrete Saw Joint Control cutting

LABO0081-003 04/01/2012

UTILITY CONSTRUCTION

STARKE COUNTY

	MULCI	(1.0502	
Laborers:			
GROUP	1\$	25.47	11.70
GROUP	2\$	25.77	11.70
GROUP	3\$	26.47	11.70

Rates

LABORERS CLASSIFICATIONS (UTILITY CONSTRUCTION)

GROUP 1: Construction laborer; Fence erector; Flagger; Grade checker; Guard rail erector; Wire mesh layer; Joint man (mortar, mastic and all other types); Lighting installer

Fringes

(permanent or temporary); Lineman for automatic grade maker on paving machines; Mortar man; Multi-plate erector; Rip-rap installer (all products and materials); Road marking and delineation laborer; Setting and placing of all precast concrete products; Sign installation including supporting structure; Spraying of all epoxy, curing compound, or like material; sod layer; Air tool, power tool, and power equipment operator; Asphalt lute man; Asphalt raker man; Batch truck dumper; Bridge handrail erector; Handler (bulk or bag cement); Chain saw man; concrete puddler; concrete rubber; Concrete saw operator; Core drill operator, eye level; Hand blade operator; Hydro seeder man; Motor-driven Georgia buggy operator; Power-driven compactor or tamper operator; Power saw operator; Pumpcrete assembly man; Screed man or screw man on asphalt paver; Rebar installer; Sandblaster man; Sealer applicator for asphalt (toxic); Setting and placing prestressed or precast concrete structural members; Side rail setter (for sidewalks, side ditches, radii, and pavements); Spreader box tender (manual or power-driven); Straw blower man; Subsurface drain and culvert pipe laver; Transverse and longitudinal hand bull float man; Concrete conveyor assembly man; Horizontal boring and jacking man; Jackman and sheetman; Pipe grade man; Winch and windlass operator

GROUP 2: Cutting torch burner; Laser beam aligner; Manhole erector; Sewer pipe layer; Water line installer, temporary or permanent; Welder (electric or oxy-acetylene) in connection with waterline and sewer work, Hod Carrier (tending bricklayers); TVing and associated grouting of utility lines

GROUP 3: Air track and wagon drillman; Concrete barrier rail form setter; Dynamite and powder man; General leadman; Concrete Saw Joint Control cutting

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LABO0081-007 04/01/2012

UTILITY CONSTRUCTION

ALL REMAINING COUNTIES

Rates Fringes

Laborers:

GROUP 1......\$ 22.62 11.70 GROUP 2......\$ 22.92 11.70 GROUP 3.....\$ 23.62 11.70

# LABORERS CLASSIFICATIONS (UTILITY CONSTRUCTION)

GROUP 1: Construction laborer; Fence erector; Flagger; Grade checker; Guard rail erector; Wire mesh layer; Joint man (mortar, mastic and all other types); Lighting installer (permanent or temporary); Lineman for automatic grade maker on paving machines; Mortar man; Multi-plate erector; Rip-rap installer (all products and materials); Road marking and delineation laborer; Setting and placing of all precast concrete products; Sign installation including supporting structure; Spraying of all epoxy, curing compound, or like material; sod layer; Air tool, power tool, and power equipment operator; Asphalt lute man; Asphalt raker man; Batch truck dumper; Bridge handrail erector; Handler (bulk or bag cement); Chain saw man; concrete puddler; concrete rubber; Concrete saw operator; Core drill operator, eye level; Hand blade operator; Hydro seeder man; Motor-driven Georgia buggy operator; Power-driven compactor or tamper operator; Power saw operator; Pumpcrete assembly man; Screed man or screw man on asphalt paver; Rebar installer; Sandblaster man; Sealer applicator for asphalt (toxic); Setting and placing prestressed or precast concrete structural members; Side rail setter (for sidewalks, side ditches, radii, and pavements); Spreader box tender (manual or power-driven); Straw blower man; Subsurface drain and culvert pipe layer; Transverse and longitudinal hand bull float man; Concrete conveyor assembly man; Horizontal boring and jacking man; Jackman and sheetman; Pipe grade man; Winch and windlass operator

GROUP 2: Cutting torch burner; Laser beam aligner; Manhole erector; Sewer pipe layer; Water line installer, temporary or permanent; Welder (electric or oxy-acetylene) in connection with waterline and sewer work, Hod Carrier (tending bricklayers); TVing and associated grouting of utility lines

GROUP 3: Air track and wagon drillman; Concrete barrier rail form setter; Dynamite and powder man; General leadman; Concrete Saw Joint Control cutting

LABO0999-001 04/01/2012

HEAVY AND HIGHWAY CONSTRUCTION

# Rates Fringes

#### Laborers:

GROUP	1\$	22.62	11.70
GROUP	2\$	22.92	11.70
GROUP	3\$	23.62	11.70

### LABORERS CLASSIFICATIONS

GROUP 1: Building and Construction Laborers; Scaffold Builders (other than for Plasterers); Mechanic Tenders; Window Washers and cleaners; Waterboys and Toolhousemen; Roofers Tenders; Railroad Workers; Masonry Wall Washers (interior and exterior); Cement Finisher Tenders; Carpenter Tenders; All Portable Water pumps with discharge up to (3) inches; Plaster Tenders; Mason Tenders; Flag & Signal Person.

GROUP 2: Waterproofing; Handling of Creosote Lumber or like treated material (excluding railroad material); Asphalt Rakers and Lutemen; Kettlemen; Air Tool Operators and all Pneumatic Tool Operators; Air and Electric Vibrators and Chipping Hammer Operators; Earth Compactors Jackmen and Sheetmen working Ditches deeper than (6) ft. in depth; Laborers working in ditches (6) ft. in depth or deeper; Assembly of Unicrete Pump; Tile Layers (sewer or field) and Sewer Pipe Laver (metallic or non-metallic): Motor driven Wheelbarrows and Concrete Buggies; Hyster Operators; Pump Crete Assemblers; Core Drill Operators; Cement, Lime or Silica Clay Handlers (bulk or bag); Handling of Toxic Materials damaging to clothing; Pneumatic Spikers; Deck Engine and Winch Operators; Water Main and Cable Ducking (metallic and non-metallic); Screed Man or Screw Operator on Asphalt Paver; Chain and Demolition Saw Operators; Concrete Conveyor Assemblers.

GROUP 3: Water Blast Machine Operator; Mortar Mixers; Welders (Acetylene or electric); Cutting Torch or Burner; Cement Nozzle. Laborers; Cement Gun Operator; Scaffold Builders when Working for Plasterers. Dynamite Men; Drillers - Air Track or Wagon Drilling for explosives Hazardous and Toxic material handler, asbestos removal or handler.

V - V

PAIN0012-006 05/01/2012

COMMERCIAL AND INDUSTRIAL

DEARBORN, OHIO, RIPLEY AND SWITZERLAND COUNTIES:

## Rates Fringes

Painters:

Bridges, Lead Abatement....\$ 24.10 8.33

Brush & Roller,

Paperhanger, Drywall Taping. \$23.10 8.33 Sandblasting, Waterblasting. \$23.85 8.33

Spray.....\$ 23.60 8.33

PAIN0027-005 06/01/2012

NEWTON COUNTY, West of Highway #41

Rates Fringes

GLAZIER.....\$ 39.50 27.97

PAIN0047-005 06/01/2012

BARTHOLOMEW, BOONE, BROWN, DECATUR, HAMILTON, HANCOCK, HENDRICKS, JACKSON, JENNINGS, JOHNSON, LAWRENCE, MARION, MARTIN, MONROE, MORGAN, ORANGE, AND SHELBY COUNTIES

Rates Fringes

Painters:

BRIDGE WORK

Brush & Roller..........\$ 25.43 11.23

Spray, Sandblaster,

Waterblaster, Lead Based

 Paint Abatement.......\$ 29.49
 11.23

 Brush, Roller.......\$ 24.43
 11.23

 Spray and Sand-Blasting....\$ 25.43
 11.23

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PAIN0080-001 07/01/2011

BENTON, CARROLL, CASS, CLINTON, FOUNTAIN, MONTGOMERY TIPPECANOE AND WARREN COUNTIES

Rates Fringes

Painters:

Brush and Roller...........\$ 22.75 13.34 Spray and Sandblasting.....\$ 23.75 13.34

# PAIN0091-007 06/01/2011

## ELKHÄRT, FULTON, KOSCIUSKO AND MARSHALL COUNTIES

Rates Fringes

Painters:

Brush & Roller, Drywall Taping & Finishing,

Vinyl/Paper Hanging.......\$ 25.68 11.85

Spray.....\$ 26.18 11.85

PAIN0118-005 05/01/2011

CLARK, CRAWFORD, FLOYD, HARRISON JEFFERSON, SCOTT AND WASHINGTON COUNTIES

Rates Fringes

Painters:

Brush, Roller & Paperhanger \$ 22.93 11.05

Spray, Sandblast &

......

PAIN0156-001 04/01/2011

DAVIESS, DUBOIS, GIBSON, KNOX, PERRY, PIKE, POSEY, SPENCER, VANDERBURGH, AND WARRICK COUNTIES

Rates Fringes

Painters:

MASTICS, CREOSOTES KEWINCH

KÖATE, & COÁL TAR ÉPOXY.....\$ 26.60 12.16

**SPRAY of MASTICS** 

CREOSOTES, KWINCH KOATE,

COAL TAR EPOXY...........\$ 27.60 12.16

SPRAY, SANDBLAST, POWER

TOOLS, WATERBLAST & STEAM

CLEANING......\$ 26.60 12.16

PAIN0197-001 08/01/2011

CLAY, GREENE, OWEN, PARKE, PUTNAM, SULLIVAN, VERMILLION AND

# VIGO COUNTIES:

	Rates	Fringes	
Painters:			
Brush & Roller		24.45	11.51
Sändblästing	-7		11.51
Spray & Pot Ma			11.51
Steel up to 30'			11.00
DÉARBORN, FRAN	KLIŃ, OHI	O, RIPLEY,	and SWITZERLAND COUNTIES
	Rates	Fringes	
GLAZIER	\$ 2	3.70	11.40

JASPER, NEWTON, PULASKI, STARKE AND WHITE COUNTIES

Rates Fringes

Painters:

Brush & Roller............\$ 33.99 19.88
Drywall Taping & Finishing..\$ 34.79 19.88

PAIN0469-002 07/01/2011

ADAMS, ALLEN, DEKALB, GRANT, HUNTINGTON, LAGRANGE, NOBLE, STEUBEN, WABASH, WELLS, and WHITLEY COUNTIES

Rates Fringes

Painters:

101' & over.....\$ 22.01 11.17 31' - 60'.....\$ 21.41 11.17 61' - 100'.....\$ 21.81 11.17 Brush, Roller, Paperhanger, & Drywall Finishing......\$ 20.56 11.17 Lead Abatement.....\$ 25.56 11.17 Spray & Sandblast Pot Tenders and Ground Personnel.......\$ 21.46 11.17

Cleaning	st, Power ast, & Stean \$ 21.!		11.17
PAIN0669-001 04,	/01/2011		
			ANKLIN, HENRY, HOWARD, JAY, TIPTON, UNION and WAYNE COUNTIES
	Rates	Fringes	
Painters: Brush; Roller; Paperhanging; I Finishers Spray/Waterbla Sandblasting	\$ 20.0 esting;		10.44
PAIN1165-014 07		irinaeniaen	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
JEFFERSON, KNOX	, MARTIN, (	ORANGE	S, FLOYD, GIBSON, HARRISION, , PERRY, PIKE, POSEY, SCOTT, AND WASHINGTON
	Rates	Fringes	
ZIATEG	Rates		
GLAZIER	\$ 26.	-	
GLAZIER  PAIN1165-017 07	\$ 26.	-	
PAIN1165-017 07	\$ 26. /01/2011 LACKFORD,	.78 DE KALE	
PAIN1165-017 07	\$ 26. /01/2011 LACKFORD,	.78 DE KALE WELLS A	11.62 B, GRANT, HUNTINGTON, JAY, ND WHITLEY COUNTIES
PAIN1165-017 07 ADAMS, ALLEN, BI NOBLE, STEUBEN,	\$ 26. /01/2011  LACKFORD, WABASH, \ Rates	DE KALE WELLS A Fringes	11.62  8, GRANT, HUNTINGTON, JAY, ND WHITLEY COUNTIES  11.62
PAIN1165-017 07 ADAMS, ALLEN, BI NOBLE, STEUBEN,	\$ 26. /01/2011 LACKFORD, WABASH, \ Rates\$ 22	DE KALE WELLS A Fringes	11.62  8, GRANT, HUNTINGTON, JAY, ND WHITLEY COUNTIES  11.62
PAIN1165-017 07 ADAMS, ALLEN, BI NOBLE, STEUBEN,	/01/2011 LACKFORD, WABASH, N Rates\$ 22	DE KALE WELLS A Fringes	11.62  3, GRANT, HUNTINGTON, JAY, ND WHITLEY COUNTIES
PAIN1165-017 07 ADAMS, ALLEN, BI NOBLE, STEUBEN, GLAZIER	/01/2011 LACKFORD, WABASH, N Rates\$ 22	DE KALE WELLS A Fringes .00	11.62  3, GRANT, HUNTINGTON, JAY, ND WHITLEY COUNTIES  11.62  ay #41) COUNTIES
PAIN1165-017 07 ADAMS, ALLEN, BI NOBLE, STEUBEN, GLAZIER	/01/2011  LACKFORD, WABASH, N  Rates \$ 22  //01/2011  TON (East of Rates	DE KALE WELLS A Fringes .00 f Highw Fringes	11.62  3, GRANT, HUNTINGTON, JAY, ND WHITLEY COUNTIES  11.62  ay #41) COUNTIES

## PAIN1165-019 07/01/2012

ELKHART, FULTON, KOSCIUSKO, LAGRANGE, MARSHALL, PULASKI, and STARKE COUNTY

	Rates	Eringes	
GLAZIER	\$ 22	,49	14.25
PAIN1165-022 (	07/01/2012		

BARTHOLOMEW, BENTON, BOONE, BROWN, CARROLL, CASS, CLAY, CLINTON, DECATUR, DELAWARE, FAYETTE, FOUNTAIN, GREENE, HAMILTON, HANCOCK, HENDRICKS, HENRY, HOWARD, JACKSON, JENNINGS, JOHNSON, LAWRENCE, MADISON, MARION, MIAMI, MONROE, MONTGOMERY, MORGAN, OWEN, PARKE, PUTNAM, RANDOLPH, RUSH, SHELBY, SULLIVAN, TIPPECANOE, TIPTON, UNION, VIGO, VERMILLION, WARREN, WAYNE, and WHITE COUNTIES

Rates Fringes

GLAZIER.......\$ 25.86 12.82

PLAS0075-001 06/01/2007

CLAY, OWEN, PARKE, PUTNAM, VERMILLION AND VIGO COUNTIES:

Rates Fringes

CEMENT MASON/CONCRETE FINISHER...\$ 22.75 8.40

FULTON AND MARSHALL COUNTIES; PULASKI COUNTY (SOUTHERN 1/2);

Rates Fringes

CEMENT MASON/CONCRETE FINISHER...\$ 29.92 10.90

PLAS0101-003 06/01/2012

PLAS0101-001.06/01/2012

ADAMS, ALLEN, DEKALB, HUNTINGTON, NOBLE, STEUBEN, WELLS AND WHITLEY COUNTIES

Rates Fringes

CEMENT MASON/CONCRETE FINISHER...\$ 29.92 10.90
PLASTERER......\$ 24.18 9.31
PLAS0438-003 06/01/2011

PULASKI (NORTHERN 2/3), JASPER (N. EASTERN PORTION OF WEST TO BUT NOT INCLUDING WHEATFIELD), ALL OF STARKE COUNTY

Rates Fringes

CEMENT MASON/CONCRETE FINISHER...\$ 34.26 21.40

PLAS0692-002 06/01/2010

**AREA #46** 

BARTHOLOMEW, BOONE, BROWN, CLARK, CLAY, CRAWFORD, DAVIESS, DUBOIS, GIBSON, HENDRICKS, JACKSON, JEFFERSON, JENNINGS, JOHNSON, KNOX, LAWRENCE, MARION, MARTIN, MONROE, MORGAN, ORANGE, OWEN, PARKE, PERRY, PIKE, POSEY, PUTNAM, SCOTT, SHELBY, SPENCER, VANDERBURGH, VERMILLION, VIGO and WARRICK COUNTIES

Rates Fringes

PLASTERER.....\$ 25.04 12.48

PLAS0692-009 07/01/2010

AREA #83

BLACKFORD, DELAWARE, GRANT, HAMILTON (Northern Part), HANCOCK (Northern Part), JAY, MADISON and WABASH COUNTIES

Rates Fringes

CEMENT MASON/CONCRETE FINISHER...\$ 24.10 10.69

PLASTERER......\$ 25.69 11.75

PLAS0692-011 06/01/2010

AREA #83

DECATUR, FAYETTE, FRANKLIN, HENRY, RANDOLPH, RUSH, UNION and WAYNE COUNTIES

INDIANA FINANCE AUTHORITY EAST END CROSSING 421034 ATTACHMENT 3 TO EXHIBIT 23 Page 38 of 64 December 27, 2012
PUBLIC-PRIVATE AGREEMENT
ATTACHMENT 3 TO EX 23
FEDERAL PREVAILING WAGE RATE

Rates Fringes

CEMENT MASON/CONCRETE FINISHER...\$ 24.10 10.69
PLASTERER......\$ 25.69 11.75

PLAS0692-015 06/01/2010

AREA #121

BENTON, CARROLL, CASS, CLINTON, FOUNTAIN, HOWARD, MIAMI, MONTGOMERY, TIPPECANOE, WARREN, WHITE and VERMILLION (Northern Part) COUNTIES

12.40

Rates Fringes

CEMENT MASON/CONCRETE FINISHER...\$ 24.95

PLASTERER......\$ 25.61 12.4

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PLAS0692-018 01/01/2011

AREA #165

**NEWTON COUNTY** 

Rates Fringes

CEMENT MASON/CONCRETE FINISHER...\$ 33.14 13.80

PLAS0692-022 01/01/2010

Southward on Rt. No. 49 to the JASPER, BENTON and WHITE County lines, including the City Limits of Wheatfield, Rensselaer and Remington, Indiana. To the West, the boundary of NEWTON County

Rates Fringes

CEMENT MASON/CONCRETE FINISHER

AREA #406......\$ 31.23 14.27

PLAS0692-023 06/01/2010

AREA #532

BOONE, HAMILTON (SOUTH HALF OF COUNTY NORTH TO NEW ROUTE

INDIANA #32 INCLUDING NOBLESVILLE); HANCOCK COUNTY (SOUTHERN AND WESTERN PART OF HANCOCK COUNTY, NORTH TO BUT NOT INCLUDING FORTVILLE); HENDRICKS, JOHNSON, MARION and MORGAN COUNTIES

Rates Fringes

CEMENT MASON/CONCRETE FINISHER...\$ 25.25 12.75

PLAS0692-027 04/01/2012

AREA #566

CRAWFORD, DAVIESS, DUBOIS, GIBSON, HARRISON, KNOX, MARTIN, PERRY, PIKE, POSEY, SPENCER, VANDERBURGH and WARRICK COUNTIES

Rates Fringes

CEMENT MASON/CONCRETE FINISHER...\$ 24.50

PLAS0692-033 05/01/2012

BROWN, CLARKE, DEARBORN, FLOYD, FRANKLIN (SOUTHERN 1/2), JENNINGS, OHIO, RIPLEY AND SWITZERLAND COUNTIES

Rates Fringes

CEMENT MASON/CONCRETE FINISHER

AREA #821......\$ 23.58 10.99

PLUM0136-003 07/01/2012

DAVIESS, DUBOIS, GIBSON, JACKSON, LAWRENCE, MARTIN, MONROE, ORANGE, OWEN, PERRY, PIKE, POSEY, SPENCER, VANDERBURGH, and WARRICK COUNTIES

Rates Fringes

Plumbers and Pipefitters.......\$ 33.07 15.21

PLUM0157-002 07/01/2012

BENTON, CARROLL, CLINTON, FOUNTAIN, MONTGOMERY, TIPPECANOE, WARREN AND WHITE COUNTIES:

13.91

Rates Fringes Plumbers and Pipefitters......\$ 35.47 13,44 \* PLUM0166-001 06/01/2012 ADAMS, ALLEN, BLACKFORD, DE KALB, GRANT, HUNTINGTON, NOBLE, STEUBEN, WABASH, WELLS, and WHITLEY COUNTIES Rates Fringes Plumber and Steamfitter......\$ 29.21 14.81 \* PLUM0166-002 06/01/2012 ELKHART, KOSCIUSKO, and LAGRANGE COUNTIES Rates Fringes and the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second o PLUM0172-001 06/04/2012 JASPER (S of the N. Side of the City of Rensselaer), MARSHALL, PULASKI and STARKE COUNTIES Rates Fringes Plumber, Pipefitter, Steamfitter......\$ 29.90 17.15

JASPER (to the City of Rensselaer) and NEWTON COUNTIES

Rates Fringes

PLUMBER.....\$ 37.32 19.09

PLUM0392-006 06/01/2012

PLUM0210-003 06/01/2012

DEARBORN, RIPLEY, OHIO AND SWITZERLAND COUNTIES

Rates Fringes

BARTHOLOMEW, BOONE, HAMILTON, HANCOCK, HENDRICKS, HOWARD, JOHNSON AND MARION COUNTIES; MIAMI COUNTY (SOUTH OF A STRAIGHT LINE WHERE ROUTE 218 ENTERS W. BOUNDARY); MORGAN, SHELBY and TIPTON COUNTIES

Rates Fringes

Plumbers and Pipefitters......\$ 33.17 15.24

....

PLUM0502-001 08/01/2011

CLARK, FLOYD AND HARRISON COUNTIES

Rates Fringes

PLUMBER/PIPEFITTER......\$ 31.00 16.13

PLUM0597-004 06/01/2012

JASPER (Excluding the city limits of Rensselaer), AND NEWTON (Entire County)

Rates Fringes

PIPEFITTER......\$ 45.05 25.09

PLUM0661-002 07/01/2012

FAYETTE, FRANKLIN, HENRY, RANDOLPH, RUSH, UNION and WAYNE COUNTIES

Rates Fringes

Plumber and Steamfitter.......\$ 31.17 14.72

......

ROOF0023-004 06/01/2012

ELKHART, FULTON, KOSCIUSKO, LAGRANGE, MARSHALL, PULASKI, and STARKE COUNTIES

Rates Fringes

Roofers:

COMPOSITION............\$ 27.61 12.07 SLATE & TILE......\$ 28.11 12.07

ROOF0023-008 06/01/2012

ALLEN, DEKALB, NOBLE, STEUBEN, and WHITLEY COUNTIES

Rates Fringes

Roofers:

COMPOSITION.......\$ 18.83 8.73 SLATE & TILE......\$ 19.33 8.73

CRAWFORD, DAVIESS, DUBOIS, GIBSON KNOX, MARTIN, ORANGE PERRY, PIKE, POSEY, SPENCER, VANDERBURGH AND WARRICK

Rates Fringes

Roofers:

COMPOSITION.......\$ 26.96 13.01 SLATE & TILE......\$ 27.46 13.01

ROOF0150-002 07/01/2012

CLAY, GREENE, OWEN, PARKE, SULLIVAN, VERMILLION AND VIGO COUNTIES

Rates Fringes

ROOFER.....\$ 26.50 10.07

SHEE0020-003 07/01/2012

ADAMS, ALLEN, BLACKFORD, CASS, DEKALB, GRANT, HOWARD, HUNTINGTON, JAY, MIAMI, NOBLE, STEUBEN, WABASH, WELLS, and WHITLEY COUNTIES

Rates Fringes

Sheet metal worker (HVAC Duct

<sup>\*</sup> ROOF0106-006 07/01/2012

Work)......\$ 29.97 18.84

SHEE0020-010 07/01/2011

BARTHOLOMEW, BOONE, BROWN, DECATUR, DELAWARE, FAYETTE, FRANKLIN, HAMILTON, HANCOCK, HENDRICKS, HENRY, JACKSON, JENNINGS, JOHNSON, LAWRENCE, MADISON, MARION, MONROE, MORGAN, ORANGE, RIPLEY, RUSH, SHELBY, TIPTON, UNION AND WASHINGTON COUNTIES

Rates Fringes

Sheet metal worker............\$ 31.72 17.75

SHEE0020-024 07/04/2011

CLAY, GREENE, MARTIN, OWEN, PARKE, PUTNAM, SULLIVAN, VERMILLION, and VIGO COUNTIES

Rates Fringes

Sheet metal worker............\$ 31.22 16.90

TEAM0135-003 04/01/2012

REMAINING COUNTIES

Rates Fringes

Truck drivers:

GROUP 1\$ 26.46 456.00/wk + .37
GROUP 2\$ 26.51 456.00/wk + .37
GROUP 3\$ 26.56 456.00/wk + .37
GROUP 4\$ 26.61 456.00/wk + .37
GROUP 5\$ 26.66 456.00/wk + .37
GROUP 6\$ 26.71 456.00/wk + .37
GROUP 7\$ 26.76 456.00/wk + .37
GRÖUP 8\$ 26.81 456.00/wk + .37
GROUP 9\$ 26.86 456.00/wk + .37
GROUP10\$ 26.31 456.00/wk + .37
GROUP11\$ 26.86 456.00/wk + .37
GROUP12\$ 26.96 456.00/wk + .37

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Single/batches axle straight trucks; Batch trucks,

wet or dry 3 (34E) axle or less; Single axle Grease and maintenance truck

GROUP 2: Single axle fuel and water trucks

GROUP 3: Single axle "dog-legs", and tandem truck or doglegs; Winch trucks or A-frames when used for transportation purposes; Drivers on batch trucks, wet or dry over 3 (34E) batches and tandem axle grease and maintenance truck

GROUP 4: Tandém axle fuel trucks; tandém axle water trucks; bituminous distributors (two-man)

GROUP 5: Tandem trucks over 15 tons payload; Single axle semi trucks; Farm tractors hauling material; Mixer trucks (all types); Trucks pulling tilt-top trailer single axle; Single axle low-boys; Truck-mounted payement breakers

GROUP 6: Tandem trucks or "dog-legs"; Semi-water Truck; Sprinkler Truck; Heavy equipment-type water wagons, 5,000 gallons and under; bituminous distributors (one-man)

GROUP 7: Tri-axle trucks; Tandem axle semi trucks; Equipment when not self-loaded or pusher loaded, such as Koehring or similar dumpsters, track trucks, Euclid bottom dump and hug bottom dump, tournatrailers, tournarockers, Acey wagons or for similar equipment (12 cu yds or less); Mobile mixer truck; Tandem Axle trucks pulling tilt-top trailer; Tandem - Axle lowboy; Tri- Axle batch Truck; Tri-Axle grease and maintenance truck

GROUP 8: Tandem-tandem semi trucks; Truck mechanics and welders; Heavy equipment-type water wagon over 5,000 gallons; Tri-Axle Trucks pulling tilt-top trailer; Low-boys, tandem-tandem axle

GROUP 9: Low-boys, tandem tri-axle; Acey wagons up to and including 3 buckets; Equipment when not self-loaded or pusher loaded, such as koehring or similar dumpsters, Track Trucks, Euclid bottom dump and hug bottom dump, Tournatrailers, Tournarockers, Acey wagons or for similar equipment (over 12 cu yds.)

GROUP 10: Pick-up trucks

GROUP 11: Helpers; Greasers; Tire men; Batch board tenders; Warehouseman

GROUP 12: Acey wagon (over 3 buckets); Quad Axle Trucks; Articulating Dump
WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.
Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

## Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rate.

0000/9999: weighted union wage rates will be published annually

each January.

## Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

### WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division

U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

## Kentucky

General Decision Number: KY120125 08/31/2012 KY125

Superseded General Decision Number: KY20100211

State: Kentucky

Construction Type: Highway

Counties: Anderson, Bath, Bourbon, Boyd, Boyle, Bracken, Breckinridge, Bullitt, Carroll, Carter, Clark, Elliott, Fayette, Fleming, Franklin, Gallatin, Grant, Grayson, Greenup, Hardin, Harrison, Henry, Jefferson, Jessamine, Larue, Lewis, Madison, Marion, Mason, Meade, Mercer, Montgomery, Nelson, Nicholas, Oldham, Owen, Robertson, Rowan, Scott, Shelby, Spencer, Trimble, Washington and Woodford Counties in Kentucky.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

# Modification Number Publication Date

 $\Omega$ 01/06/2012 01/13/2012 1 2 01/20/2012 3 04/13/2012 4 05/11/2012 5 05/25/2012 6 06/01/2012 7 06/22/2012 8 06/29/2012 9 07/13/2012 10 07/20/2012 08/03/2012 11 12 08/10/2012 13 08/17/2012 14 08/24/2012 15 08/31/2012

BRIN0004-003 06/01/2011

**BRECKENRIDGE COUNTY** 

Fringes Rates BRICKLAYER.....\$ 24.11 BRKY0001-005 06/01/2011 BULLITT, CARROLL, GRAYSON, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, & TRIMBLE COUNTIES: Rates Fringes BRKY0002-006 06/01/2011 BRACKEN, GALLATIN, GRANT, MASON & ROBERTSON COUNTIES: Rates Fringes BRICKLAYER...... \$ 26.57 10.26 . Laulanan en anne anne antiga en en en el litte fra en estade e la distribue antiga de la estade la entre de la BRKY0007-004 06/01/2011 BOYD, CARTER, ELLIOT, FLEMING, GREENUP, LEWIS & ROWAN COUNTIES: Rates Fringes BRICKLAYER.....\$ 28.29 16.80 BRKY0017-004 06/01/2009 ANDERSON, BATH, BOURBON, BOYLE, CLARK, FAYETTE, FRANKLIN, HARRISON, JESSAMINE, MADISON, MERCER, MONTGOMERY, NICHOLAS, OWEN, SCOTT, WASHINGTON & WOODFORD COUNTIES: Rates Fringes CARPO064-001 07/01/2012

INDIANA FINANCE AUTHORITY EAST END CROSSING 421034

Rates

CARPENTER.....\$ 26.40

Diver......\$ 39.98 13.91

Fringes

ATTACHMENT 3 TO EXHIBIT 23
Page 50 of 64

13.91

December 27, 2012
PUBLIC-PRIVATE AGREEMENT
ATTACHMENT 3 TO EX 23
FEDERAL PREVAILING WAGE RATE

PILEDRIVERMAN.....\$ 26.65 13.91 ELECO212-008 05/28/2012 BRACKEN, GALLATIN and GRANT COUNTIES Rates Fringes ELECTRICIAN......\$ 26.11 15.42 ELEC0212-014 06/27/2011 BRACKEN, GALLATIN & GRANT COUNTIES: Rates Fringes Sound & Communication Technician \$21.55 8.46 ELEC0317-012 05/30/2012 BOYD, CARTER, ELLIOT & ROWAN COUNTIES: Rates Fringes Electricians: Cable Splicer.....\$ 32.68 18.13

ELEC0369-007 05/30/2012

Electrician......\$ 32.22

ANDERSON, BATH, BOURBON, BOYLE, BRECKINRIDGE, BULLITT, CARROLL, CLARK, FAYETTE, FRANKLIN, GRAYSON, HARDIN, HARRISON, HENRY, JEFFERSON, JESSAMINE, LARUE, MADISON, MARION, MEADE, MERCER, MONTGOMERY, NELSON, NICHOLAS, OLDHAM, OWEN, ROBERTSON, SCOTT, SHELBY, SPENCER, TRIMBLE, WASHINGTON, & WOODFORD COUNTIES:

20.09

Rates Fringes

ELECTRICIAN......\$ 29.32 13.78

\* ELEC0575-002 05/28/2012

FLEMING, GREENUP, LEWIS & MASON COUNTIES:

Rates Fringes

ENGI0181-018 07/01/2012

Rates Fringes

## Operating Engineer:

GROUP 1\$ 27.35	13.40
GROUP 2\$ 24.87	13.40
GROUP 3\$ 25.26	13.40
GROUP 4\$ 24.60	13.40

## **OPERATING ENGINEER CLASSIFICATIONS**

GROUP 1 - A-Frame Winch Truck; Auto Patrol; Backfiller; Batcher Plant; Bituminous Paver; Bituminous Transfer Machine; Boom Cat; Bulldozer; Mechanic; Cableway; Carry-All Scoop; Carry Deck Crane; Central Compressor Plant; Cherry Picker; Clamshell; Concrete Mixer (21 cu. ft. or Over); Concrete Paver; Truck-Mounted Concrete Pump; Core Drill; Crane; Crusher Plant; Derrick; Derrick Boat; Ditching & Trenching Machine; Dragline; Dredge Operator; Dredge Engineer; Elevating Grader & Loaders; Grade-All; Gurries; Heavy Equipment Robotics Operator/Mechanic; High Lift; Hoe-Type Machine; Hoist (Two or More Drums); Hoisting Engine (Two or More Drums); Horizontal Directional Drill Operator; Hydrocrane; Hyster; KeCal Loader; LeTourneau; Locomotive; Mechanic; Mechanically Operated Laser Screed; Mechanic Welder; Mucking Machine; Motor Scraper; Orangepeel Bucket; Overhead Crane; Piledriver; Power Blade; Pumpcrete; Push Dozer; Rock Spreader, attached to equipment; Rotary Drill; Roller (Bituminous); Rough Terrain Crane; Scarifier; Scoopmobile; Shovel; Side Boom; Subgrader; Tailboom; Telescoping Type Forklift; Tow or Push Boat; Tower Crane (French, German & other types); Tractor Shovel; Truck Crane; Tunnel Mining Machines, including Moles, Shields or similar types of Tunnel Mining Equipment

GROUP 2 - Air Compressor (Over 900 cu. ft. per min.);
Bituminous Mixer; Boom Type Tamping Machine; Bull Float;
Concrete Mixer (Under 21 cu. ft.); Dredge Engineer;
Electric Vibrator; Compactor/Self-Propelled Compactor;
Elevator (One Drum or Buck Hoist); Elevator (When used to Hoist Building Material); Finish Machine; Firemen & Hoist (One Drum); Flexplane; Forklift (Regardless of Lift Height); Form Grader; Joint Sealing Machine; Outboard Motor Boat; Power Sweeper (Riding Type); Röller (Röck); Ross Carrier; Skid Mounted or Trailer Mounted Concrete Pump; Skid

Steer Machine with all Attachments; Switchman or Brakeman; Throttle Valve Person; Tractair & Road Widening Trencher; Tractor (50 H.P. or Over); Truck Crane Oiler; Tugger; Welding Machine; Well Points; & Whirley Oiler

GROUP 3 - All Off Road Material Handling Equipment, including Articulating Dump Trucks; Greaser on Grease Facilities servicing Heavy Equipment

GROUP 4 - Bituminous Distributor; Burlap & Curing Machine; Cement Gun; Concrete Saw; Conveyor; Deckhand Oiler; Grout Pump; Hydraulic Post Driver; Hydro Seeder; Mud Jack; Oiler; Paving Joint Machine; Power Form Handling Equipment; Pump; Roller (Earth); Steerman; Tamping Machine; Tractor (Under 50 H.P.); & Vibrator

CRANES - with booms 150 ft. & Over (Including JIB), and where the length of the boom in combination with the length of the piling leads equals or exceeds 150 ft. - \$1.00 over Group 1 rate

EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID 10%

ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN OUT WORK.

IRON0044-009 06/01/2012

BRACKEN, GALLATIN, GRANT, HARRISON, ROBERTSON,
BÖÜRBON (Northern third, including Townships of Jackson,
Millersburg, Ruddel Mills & Shawhan);
CARROLL (Eastern third, including the Township of Ghent);
FLEMING (Western part, excluding Townships of Beechburg, Colfax,
Elizaville, Flemingsburg, Flemingsburg Junction, Foxport,
Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills,
Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar
Plains, Ringos Mills, Tilton & Wallingford);
MASON (Western two-thirds, including Townships of Dover,
Lewisburg, Mays Lick, Maysville, Minerva, Moranburg,
Murphysville, Ripley, Sardis, Shannon, South Ripley &
Washington);
NICHOLAS (Townships of Rarofoot, Raxtarville, Carlisle)

NICHOLAS (Townships of Barefoot, Barterville, Carlisle, Ellisville, Headquarters, Henryville, Morningglory, Myers & Oakland Mills);

OWEN (Townships of Beechwood, Bromley, Fairbanks, Holbrook, Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita & Wheatley);

SCOTT (Northern two-thirds, including Townships of Biddle,

Davis, Delaplain, Elmville, Longlick, Muddy Ford, Oxford, Rogers Gap, Sadieville, Skinnersburg & Stonewall)

Rates Fringes

**IRONWORKER** 

Fence Erector...........\$ 22.50 15.10 Structural...........\$ 24.80 15.10

### IRON0070-006 06/01/2012

ANDERSON, BOYLE, BRECKINRIDGE, BULLITT, FAYETTE, FRANKLIN, GRAYSON, HARDIN, HENRY, JEFFERSON, JESSAMINE, LARUE, MADISON, MARION, MEADE, MERCER, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE, WASHINGTON & WOODFORD
BOURBON (Southern two-thirds, including Townships of Austerlity, Centerville, Clintonville, Elizabeth, Hutchison, Littlerock, North Middletown & Paris);
CARROLL (Western two-thirds, including Townships of Carrollton, Easterday, English, Locust, Louis, Prestonville & Worthville);
CLARK (Western two-thirds, including Townships of Becknerville, Flanagan, Ford, Pine Grove, Winchester & Wyandotte);
OWEN (Eastern eighth, including Townships of Glenmary, Gratz, Monterey, Perry Park & Tacketts Mill);
SCOTT (Southern third, including Townships of Georgetown, Great Crossing, Newtown, Stampling Ground & Woodlake);

	Rates	Fringes	
IRONWORKER		\$ 26.34	18.58
	and the second second second	ad an artist to an arms to the art of tales at a real	

BRACKEN, GALLATIN, GRANT, HARRISON and ROBERTSON
BOURBON (Northern third, including Townships of Jackson,
Millersburg, Ruddel Mills & Shawhan);
CARROLL (Eastern third, including the Township of Ghent);
FLEMING (Western part, Excluding Townships of Beechburg, Colfax,
Elizaville, Flemingsburg, Flemingsburg Junction, Foxport,
Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills,
Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar
Plains,
Ringos Mills, Tilton & Wallingford);
MASON (Western two-thirds, including Townships of Dover,
Lewisburg, Mays Lick, Maysville, Minerva, Moranburg,
Murphysville, Ripley, Sardis, Shannon, South Ripley &

IRON0372-006 06/01/2012

Washington);

NICHOLAS (Townships of Barefoot, Barterville, Carlisle, Ellisville, Headquarters, Henryville, Morningglory, Myers & Oakland Mills);

OWEN (Townships of Beechwood, Bromley, Fairbanks, Holbrook, Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita & Wheatley);

SCOTT (Northern two-thirds, including Townships of Biddle, Davis, Delaplain, Elmville, Longlick, Muddy Ford, Oxford, Rogers Gap, Sadieville, Skinnersburg & Stonewall) COUNTIES

### Rates Fringes

### IRONWORKER, REINFORCING

Beyond 30-mile radius of Hamilton County, Ohio

Courthouse.......\$ 26.59 18.58

Up to & including 30-mile radius of Hamilton County,

Ohio Courthouse......\$ 26.34 18.58

### IRON0769-007 06/01/2012

BATH, BOYD, CARTER, ELLIOTT, GREENUP, LEWIS, MONTGOMERY & ROWAN CLARK (Eastern third, including townships of Bloomingdale, Hunt, Indian Fields, Kiddville, Loglick, Rightangele & Thomson); FLEMING (Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford); MASON (Eastern third, including Townships of Helena, Marshall, Orangeburg, Plumville & Springdale); NICHOLAS (Eastern eighth, including the Township of Moorefield

## Rates Fringes

# IRONWORKER

Sprout)

ZONE 1\$ 30.52	20.08
ZONE 2\$ 30.92	20.08
ZONE 3, \$ 32.52	20.08

ZONE 1 - Up to 10 mi. radius of union hall, Ashland, Ky., 1643 Greenup Avenue

ZONE 2 - 10 to 50 mi. radius of union hall;

ZONE 3 - 50 mi. radius and beyond

LABO0189-003 07/01/2012

BATH, BOURBON, BOYD, BOYLE, BRACKEN, CARTER, CLARK, ELLIOTT, FAYETTE, FLEMING, FRANKLIN, GALLATIN, GRANT, GREENUP, HARRISON, JESSAMINE, LEWIS, MADISON, MASON, MERCER, MONTGOMERY, NICHOLAS, OWEN, ROBERTSON, ROWAN, SCOTT, & WOOLFORD COUNTIES

	Rates	Fringes	
GROUP GROUP	1\$ 2\$ 3\$ 4\$	21.40 21.45	11.41 11.41 11.41 11.41

#### LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer);
Brickmason Tender; Mortar Mixer Operator; Scaffold Builder;
Burner & Welder; Bushammer; Chain Saw Operator; Concrete
Saw Operator; Deckhand Scow Man; Dry Cement Handler;
Environmental - Nuclear, Radiation, Toxic & Hazardous Waste
- Level C; Forklift Operator for Masonry; Form Setter;
Green Concrete Cutting; Hand Operated Grouter & Grinder
Machine Operator; Jackhammer; Pavement Breaker; Paving
Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven
Georgia Buggy & Wheel Barrow; Power Post Hole Digger;
Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind
Trencher; Sand Blaster; Concrete Chipper; Surface Grinder;
Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman;

Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

LABO0189-008 07/01/2012

ANDERSON, BULLITT, CARROLL, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE & WASHINGTON COUNTIES

	Rates	Fringes	
Laborers:			
GROUP	1\$	21.61	10.95
GROUP	2\$	21.86	10.95
GROUP	3\$	21.91	10.95
GROUP	4\$	22.51	10.95

### LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Scaffold Builder; Burner & Welder; Bushammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonry; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Orillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

LABO0189-009 07/01/2012

### **BRECKINRIDGE & GRAYSON COUNTIES**

Laborers:  GROUP 1\$ 21.96 10.6	
GROUP 1	
2002	0
GROUP 2\$ 22.21 10.6	0
GROUP 3\$ 22.26 10.6	0
GROUP 4\$ 22.86 10.6	0

### LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Scaffold Builder; Burner & Welder; Bushammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonry; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

PAIN0012-005 06/11/2005

BATH, BOURBON, BOYLE, CLARK, FAYETTE, FLEMING, FRANKLIN, HARRISON, JESSAMINE, MADISON, MERCER, MONTGOMERY, NICHOLAS, ROBERTSON, SCOTT & WOODFORD COUNTIES:

Rates Fringes

## PAINTER

Bridge/Equipment Tender

and/or Containment Builder..\$ 18.90 5.90

Brush & Roller...........\$ 21.30 5.90

Elevated Tanks;

Steeplejack Work; Bridge &

Lead Abatement.......\$ 22.30 5.90

Sandblasting &

PAIN0012-017 05/01/2012

BRACKEN, GALLATIN, GRANT, MASON & OWEN COUNTIES:

Rates Fringes

PAINTER (Heavy & Highway Bridges - Guardrails -Lightpoles - Striping) Bridge Equipment Tender and Containment Builder.....\$ 20.49 8.33 8.33 Elevated Tanks; Steeplejack Work; Bridge & Lead Abatement.....\$ 24.10 8.33 Sandblasting & Water Blasting.....\$ 23.85 8.33 Spray.....\$ 23.60 8.33 اندوان فرانده الدوان الدوان أندوان مواند الوجود الدوان والموان وال PAIN0118-004 05/01/2010 ANDERSON, BRECKINRIDGE, BULLITT, CARROLL, GRAYSON, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE & WASHINGTON COUNTIES: Rates Fringes PAINTER Brush & Roller.....\$ 18.50 10.30 Spray, Sandblast, Power Tools, Waterblast & Steam Cleaning....... \$ 19.50 10.30 والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمراقبة والمرا PAIN1072-003 12/01/2011 BOYD, CARTER, ELLIOTT, GREENUP, LEWIS and ROWAN COUNTIES Rates Fringes Painters: Bridges; Locks; Dams; Tension Towers & Energized Substations.....\$ 29.33 14.20 Power Generating Facilities.\$ 26.09 14.20 gravitation and the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the c PLUM0248-003 06/01/2012 BOYD, CARTER, ELLIOTT, GREENUP, LEWIS & ROWAN COUNTIES: Rates Fringes Plumber and Steamfitter......\$ 33.00 

INDIANA FINANCE AUTHORITY EAST END CROSSING 421034 ATTACHMENT 3 TO EXHIBIT 23
Page 60 of 64

December 27, 2012
PUBLIC-PRIVATE AGREEMENT
ATTACHMENT 3 TO EX 23
FEDERAL PREVAILING WAGE PATE

## PLUM0392-007 06/01/2012

BRACKEN, CARROLL (Eastern Half), GALLATIN, GRANT, MASON, OWEN & ROBERTSON COUNTIES:

Rates Fringes

Plumbers and Pipefitters......\$ 29.30 16.59

PLUM0502-003 08/01/2011

BRECKINRIDGE, BULLITT, CARROLL (Western Haif), FRANKLIN (Western three-fourths), GRAYSON, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE & WASHINGTON COUNTIES

Rates Fringes

PLUMBER......\$ 31.00 16.13

SUKY2010-160 10/08/2001

Rates Fringes

Truck drivers:

GROUP 1\$ 16.57	7.34
GROUP 2\$ 16.68	7.34
GROUP 3\$ 16.86	7.34
GROUP 4	7 34

#### TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Mobile Batch Truck Tender

GROUP 2 - Greaser; Tire Changer; & Mechanic Tender

GROUP 3 - Single Axle Dump; Flatbed; Semi-trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Distributor; Mixer; & Truck Mechanic

GROUP 4 - Euclid & Other Heavy Earthmoving Equipment & Lowboy; Articulator Cat; 5-Axle Vehicle; Winch & A-Frame when used in transporting materials; Ross Carrier; Forklift when used to transport building materials; & Pavement Resolver.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

### Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rate.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

#### WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

### ATTACHMENT 4 TO EXHIBIT 23

## EQUAL EMPLOYMENT OPPORTUNITY

# SPECIAL PROVISION 000---006

# Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246)

- 1. As used in these specifications:
  - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted:
  - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
  - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941
  - d. "Minority" includes:
    - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
    - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
    - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
    - (iv) American Indian or Indianan Native (all persons having origins in any of the original peoples of North American and maintaining identifiable tribal affiliations through membership and participation or community identification).
- 2. Whenever the contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
- 3. If the contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U. S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Hometown Plan area (including goals and timetables) shall be in accordance with that plan for those trades which have unions participating in the Hometown Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved Hometown Plan is individually required to comply

with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Hometown Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Hometown Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Hometown Plan goals and timetables.

- 4. The contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing contracts in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the contract is being performed. Goals are published periodically in the Federal Register in notice form and such notices may be obtained from any Office of Federal Contract Compliance Programs office or any Federal procurement contracting officer. The contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.
- 5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
- 6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the contractor during the training period, and the contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U. S. Department of Labor.
- 7. The contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
  - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the contractor's employees are assigned to work. The contractor, where possible, will assign two or more women to each construction project. The contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
  - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

- c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the contractor may have taken.
- d. Provide immediate written notification to the Director when the union or unions with which the contractor has a collective bargaining agreement has not referred to the contractor a minority person or woman sent by the contractor, or when the contractor has other information that the union referral Process has impeded the contractor's efforts to meet its obligations.
- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the contractor's employment needs, especially those programs funded or approved by the Department of Labor. The contractor shall provide notice of these programs to the sources compiled under 7b above.
- f. Disseminate the contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the contractor's EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the contractor's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the contractor's EEO policy with other contractors and subcontractors with whom the contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the contractor's EEO policy and the contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and company activities are non-segregated except that separate
  or single-user toilet and necessary changing facilities shall be provided to assure privacy
  between the sexes.
- Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
- p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the contractor's EEO policies and affirmative action obligations.
- 8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the contractor. The obligation to comply, however, is the contractor's noncompliance.
- 9. A single goal for minorities and a separate single goal for women have been established. The contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the contractor has achieved its goals for women generally, the contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).

- Nondiscrimination programs require that Federal-aid recipients, subrecipients, and contractors prevent discrimination and ensure nondiscrimination in all of their programs and activities, whether those programs and activities are federally funded or not. The factors prohibited from serving as a basis for action or inaction which discriminates include race, color, national origin, sex, age, and handicap/disability. The efforts to prevent discrimination must address, but not be limited to a program's impacts, access, benefits, participation, treatment, services, contracting opportunities, training opportunities, investigations of complaints, allocations of funds, prioritization of projects, and the functions of right-of-way, research, planning, and design.
- 11. The contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
- 12. The contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs, Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
- The contractor, in fulfilling its obligations under these specifications, shall implement 13. specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
- The contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement. contractors shall not be required to maintain separate records.
- Nothing herein provided shall be construed as a limitation upon the application of other 15. laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).
- In addition to the reporting requirements set forth elsewhere in this contract, the 16. contractor and the subcontractors holding subcontracts, not including material suppliers, of \$10,000 or more, shall submit for every month of July during which work is performed, employment data as contained under Form PR 1391 (Appendix C to 23 CFR, Part 230), and in accordance with the instructions included thereon.

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## ATTACHMENT 5 TO EXHIBIT 23

## AFFIRMATIVE ACTION

# SPECIAL PROVISION 000-0004

Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246)

### 1. General.

In addition to the affirmative action requirements of the Special Provision titled "Standard Federal Equal Employment Opportunity Construction Contract Specifications" as set forth in <a href="Attachment 4">Attachment 4</a> to this <a href="Exhibit 23">Exhibit 23</a>, the contractor's attention is directed to the specific requirements for utilization of minorities and females as set forth below.

### 2. Goals.

- Goals for minority and female participation are hereby established in accordance with 41 CFR 60-4.
- b. The goals for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

Goals for minority participation in each trade

(per-cent)

See Table 1

Goals for female participation in each trade

(per-cent)

6.9%

O. These goals are applicable to all the contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction. The contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Standard Federal Equal Employment Opportunity Construction Contract Specifications Special Provision and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority and female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the

Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

## 3. Subcontracting.

The contractor shall provide written notification to IFA within ten Business Days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation pending concurrence of IFA in the award. The notification shall list the names, address and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.

### 4. Covered area.

As used in this special provision, and in the contract resulting from this solicitation, the geographical area covered by these goals for female participation is the State of Indiana. The geographical area covered by these goals for other minorities are the boroughs or other geographic areas in the State of Indiana as indicated in <u>Table 1</u>.

## 5. Reports.

The contractor is hereby notified that he may be subject to the Office of Federal Contract Compliance Programs (OFCCP) reporting and record keeping requirements as provided for under Executive Order 11246 as amended. OFCCP will provide direct notice to the contractor as to the specific reporting requirements that he will be expected to fulfill.

## Table 1

Borough or Other	Goals for Minority	
Geographic Area	Participation	County
State of Indiana	11.2% (minority)	Clark County

## ATTACHMENT 6 TO EXHIBIT 23

COMPLIANCE WITH 23 U.S.C. §129(a)(3) AND WITH THE AGREEMENT BETWEEN THE INDIANA FINANCE AUTHORITY AND THE FEDERAL HIGHWAY ADMINISTRATION FOR FUNDING FOR THE DEVELOPMENT, DESIGN, AND CONSTRUCTION OF THE EAST END CROSSING (THE "SECTION 129 AGREEMENT")

## 1. Certification of Adequate Maintenance

- a. The Section 129 Agreement requires IFA to annually certify to the FHWA that the project is being adequately maintained.
- b. To enable IFA to issue such certifications, Developer shall issue to IFA not later than 15 days after the end of each calendar year, starting with the calendar year in which the Substantial Completion Date occurs, a written certificate, in form reasonably acceptable to IFA, certifying that the project is being adequately maintained. If FHWA prescribes a form of certificate from IFA, then Developer shall deliver to IFA a certificate in the same form.

## 2. Annual Audit of Records

- a. The Section 129 Agreement requires IFA to annually audit the records of the project for compliance with the provisions of the Section 129 Agreement, and to report the audit results to the FHWA. The Section 129 Agreement provides that in lieu of IFA performing the audit, IFA may deliver to the FHWA a report of an independent auditor furnished by Developer.
- b. To enable IFA to comply with such annual audit requirement as it relates to compliance with the obligation in the Section 129 Agreement to adequately maintain the project. Developer shall prepare and deliver to IFA a written report of the results of each Performance Inspection and Asset Condition Score by Developer. IFA shall have the right to deliver to the FHWA copies of such reports. In addition, Developer shall permit the FHWA to audit Developer's O&M Records upon request.

# EXHIBIT 24

# INITIAL DESIGNATION OF AUTHORIZED REPRESENTATIVES

IFA: Kendra York, Public Finance Director, Indiana Finance Authority

Developer: Sidney Florey, Project Executive